

# The Mining Journal,

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1812.—VOL. XL.

London, Saturday, May 14, 1870.

(WITH SUPPLEMENT) { STAMPED ... SIXPENCE.  
UNSTAMPED... FIVEPENCE.

**M. R. JAMES CROFTS, STOCK AND SHAREDEALER,**  
No. 1, FINCH LANE, CORNHILL.  
(ESTABLISHED 1842.)

The great advance in the price of tin is creating an immense demand for shares in good tin mines. At the ROCH CONSOLS TIN MINE (Roch, Cornwall), in 2000 shares, large returns can be made at a very low cost, whilst black tin is now over \$1 per ton. A most important discovery has taken place in the mid-dome. At a depth of only 5 fms. from the surface the lode has been extraordinarily rich, being in some parts worth a hundred weight of tin to the ton of lead-stuff. The latest accounts state that not only does the late discovery continue but the lode has further improved, and the tin-stuff now being raised is the richest yet seen in the mine. The shares have risen to 12s. 6d., and are advancing. The mine is situated at the head of the Goss Moors, from which millions worth of tin have been raised.

Every description of shares BOUGHT AND SOLD at net prices.

Bankers: Metropolitan Bank.

**M. R. W. H. BUMPUS, STOCK AND SHAREDEALER,**  
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—  
75 Anglo-Austral., 19s 6d. 100 Frontino, 16s. 6d. 25 So. Condurrow, £3 1/2.  
50 Anglo-Brazil, 9s. 6d. 5 Great Vor. 10 St. John del Rey, £20/20  
10 Asheton, £8 18s. 9d. 10 Great Laxey, £18 3/4. 10 Taquari, 8s. 9d prem.  
25 Australian Unit, £3 1/4. 10 Great Laxey, £18 3/4. 15 Tan-y-Ait.  
20 Bwadrain Cons., 42s. 40 Gen. Brazilian, 16s 9d. 5 Tankerville.  
20 Brynpostig. 40 Gr. No. Laxey, 8s. 5 Tankerville, £18 3/4.  
15 Bwch Consols, £3 1/2. 15 Hindston Down, 20s. 10 Great Rock, £6 1/2.  
25 Caegwyn, £2 1/2. Bray, 22s. 6d. 20 Holmbush, and Kelly 2 Van.  
50 Cadgwyk Fells, 25s 6d. 25 West Maria, £2 1/2.  
40 Chontales, £1 1/2. 30 West Pant-y-Go, 20s 9/4. 20 W. Godolwin, 16s. 6d.  
30 Drake Walls, 30s. 25 New Lovell. 15 W. Tankerville, £3 3/4.  
10 Don Pedro, £3 12s. 9d. 40 No. Troskerby, 11s. 9d. 5 W. Chiverton, 16s. 6d.  
15 East Caradon, £1 1/2. 25 Pen'Alt, 3s. 25 W. Drake Walls, 2s 9d.  
60 Eclipse, 1s. 6d. prem. 50 Pestarena, 2s. 6d. 10 W. Grenville, 39s.  
10 East Lovell, £2 75s. 75 Pore Phillip, 19s. 6d. 25 Wheal Uny.  
25 E. New Lovell, 14s 9d. 10 Pacific, £7 3/4. 30 W. Crebor, 16s. 3d.  
20 Frank Mills, £3. 3 Providence.

CAEGYNTON MINE.—I strongly recommend the purchase of these shares, for the following reasons:—

1.—The shares are fully paid—no further liability—cash balance in hand nearly £8000.

2.—Above the 40 fm. level several thousand pounds worth of lead ore has been broken and sold. There is also a considerable quantity of ore standing and now being stoned, leaving good profits. In the bottom of the same level two winzes are being sunk in a lode worth from 1 1/2 to 2 tons of lead per fathom. The 50 fm. level is being driven to intersect these winzes, and when completed between 300 and 400 tons of lead ore will be laid open in the back of the 50 alone.

3.—The south lode is rich for blonde, and will soon lay open scores of fathoms of good stoning ground.

4.—The machinery is all in perfect order, and worked by water-power. See full report in *Mining Journal* of 30th April.

5.—Early dividends may confidently be relied upon.

W. H. B. transacts business in every description of shares at the best market prices, and free of commission.

Bankers: The Metropolitan Bank (Limited), Cornhill, E.C.

**M. R. WILLIAM WARDE,**  
95, BISHOPSGATE STREET WITHIN, LONDON, E.C.

**J. JOHN RISLEY, (SWORN) STOCK AND SHAREDEALER,**  
48, THREADNEEDLE STREET, LONDON, E.C.  
Bankers: London and Westminster, Lombury.

**M. R. Y. CHRISTIAN, STOCK AND SHAREDEALER,**  
11, ROYAL EXCHANGE, E.C.,  
Bankers: Bank of England.

**M. R. T. A. MUNDY, STOCK AND SHAREDEALER,**  
38, BISHOPSGATE STREET WITHIN, E.C.  
Bankers: City Bank.

**M. R. JOHN MOSS, STOCK AND SHAREDEALER,**  
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.  
Bankers: City Bank, Finch-lane, E.C.

**M. R. J. B. REYNOLDS, STOCK AND SHAREDEALER,**  
70 AND 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.  
Bankers: City Bank.

**M. ESSRS. A. STUART AND CO., 93, BISHOPSGATE**  
STREET WITHIN, LONDON, E.C.

**M. R. THOMAS ROSEWARNE, SHAREDEALER,**  
81, OLD BROAD STREET, LONDON, E.C.

T. R. has BUSINESS in the following SHARES for cash or time on. Parties desirous of dealing for time on will please state the number of shares and the names of mines, and they will be dealt with upon liberal terms:—

Asheton. Hington Down. West Maria.  
Bronfloyd. Tan-yr-Alt. Tin-roof.  
Bwch Consols. Fen'Alt. South Condurrow.  
Cae Gwyn. Penrhyn. West Seton.  
Chontales. Tankerville. Plymmon.  
Devon Consols. West Tankerville. West Chiverton.  
Don Pedro. Van. South Frances.  
East Lovell. Van Consols. Sweetland Creek.  
Pacific. East Caradon. Wheal Crebor.  
Great Rock. East Basset. Gawton.  
Prince of Wales. Wheal Agar. Providence.  
Chiverton Moor.

T. R., being a member of the Mining Exchange, is not allowed, by its rules, to advertise shares at fixed prices; if he were, it would surprise some parties to know the price he is prepared to sell at for time on, particularly in some of the Welsh mines he has recently personally inspected, which now stand at high prices.

All communications by letter or telegram received in strict confidence, and punctually attended to.

Money advanced to any extent on good mining shares.

Office hours Ten to Four.

Bankers: Bank of England.

**M. R. H. WADDINGTON, 48, THREADNEEDLE STREET,**  
LONDON.

H. W., having just returned from Cornwall, can give the latest reliable information on South Condurrow, Wheal Agar, New Seton, Wheal Uny, East Lovell, &c.

**M. R. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,**  
BISHOPSGATE STREET, LONDON, E.C. (Established 15 years), has FOR SALE the FOLLOWING SHARE, at net prices:—

25 Aberdaunant. 50 Eclipse, 1s. 9d. prem. 25 Penrhyn, £2 1s.  
10 Asheton. 25 East Seton, 2s.  
50 Anglo-Argent., 2s 3d. 10 Great Laxey, £2 1s.  
20 Bronfloyd, £3 16s. 9d. 10 M. Bassett, £2 1/2.  
50 Branganza, 18s. 6d. 20 East Bottle Hill, 10s.  
30 Bwch Cons., £2 13s 9d. 50 Frontino, 16s. 9d.  
20 Bwadrain Consols. 10 Great Rock, £6 1/2.  
10 Chiverton Moor, £5. 50 Gen. Brazilian, 2s 6d.  
15 Cefn Consols. 50 Great Laxey, £18 7s 6  
50 Chontales, 3s. 6d. prem.  
10 Chiv. Valley, £4 1s 9d. 50 Penrhyn, £2 1/2.  
30 Cadgwyk Fells, 26s 2d. 10 Great Trevodoe, 10s.  
20 Chiverton, £2.  
15 Cardigan Bay, £7 3/4.  
10 Devon Consols, £1 1/2.  
25 Drake Walls, 30s.  
20 East Grenville, 29s.  
100 Excelsior. 50 Harewood Con., 5s 6d.  
50 Nanglais; 100 Pen'Alt.; 80 Drake Walls; 40 Wheal Trevodoe; 5 East Lovell; 35 West Tankerville; 25 Bwch Consols; 60 North Treskerby; 30 East Grenville; 10 Great Caradon; 90 Redmoor; 35 Van Consols; 60 East Seton; 30 Cadgwyk Fells; 100 East New Wheal Lovell; 25 Hammett; 125 Gwydir Park; 20 Pacific; 40 Carn Camborne; 100 Sweetland Creek; 50 Van Consols; 50 Plymmon.

Mr. BUDGE recommends the purchase of Bwadrain Consols at the present low price. There was sold on the 5th inst. 30 tons of lead ore.

**M. R. GEORGE BUDGE, STOCK AND SHAREDEALER,**  
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—

2 Minera; 100 West Pant-y-Go; 80 Bwadrain Consols; 30 Bronfloyd; 6 South Frances; 25 Polbrean; 70 East Chiverton; 50 Wheal Agar; 20 Wheal Grenville; 10 Nanglais; 100 Pen'Alt.; 80 Drake Walls; 40 Wheal Trevodoe; 5 East Lovell; 35 West Tankerville; 25 Bwch Consols; 60 North Treskerby; 30 East Grenville; 10 Great Caradon; 90 Redmoor; 35 Van Consols; 60 East Seton; 30 Cadgwyk Fells; 100 East New Wheal Lovell; 25 Hammett; 125 Gwydir Park; 20 Pacific; 40 Carn Camborne; 100 Sweetland Creek; 50 Van Consols; 50 Plymmon.

Mr. BUDGE recommends the purchase of Bwadrain Consols at the present low price. There was sold on the 5th inst. 30 tons of lead ore.

**THE VAN, TANKERVILLE, WEST TANKERVILLE,  
BWLCH CONSOLS, BRONFLOYD, GREAT ROCK,  
AND OTHER WELSH LEAD MINES.**

**IMPORTANT TO SHAREHOLDERS AND OTHERS.**  
PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," &c., of Friday, May 6, No. 551, and also of yesterday, Friday, May 13, No. 552, price 6d, each copy, forwarded on application, contains information on the following mines:—

**The Van.** Bronfloyd. North Croft.  
Tankerville. Great Rock. East Seton.  
West Tankerville. East Lovell. Chontales.  
Bwlch Consols. Great Western.

**THE LONDON DAILY RECORD—  
STOCK AND SHARE LIST.**

Published every evening at 5 o'clock.  
Forwarded by same night's mail to subscribers.

Entered at Stationers' Hall, July, 1866.

Contains the latest closing prices of any share-list published; showing the rise and fall in railways, banks, foreign stocks, colonial securities, American securities, foreign railways; telegraphic, insurance, steamship, and miscellaneous shares; Cornish and Welsh mines, foreign gold mines, &c.

With remarks on the daily operations, and advice as to purchases or sales. Annual subscription, £1 1s.; by post, £2 2s.; monthly subscription by post, 4s; single copy, 1d.; by post, 2d.

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**M. R. EDWARD COOKE, STOCK AND MINING SHAREDEALER,**  
76, OLD BROAD STREET (and Mining Exchange), LONDON, E.C.  
Bankers: Alliance Bank.

**M. R. JAMES STOCKER, STOCK AND SHAREDEALER,**  
31, THREADNEEDLE STREET (and Mining Exchange), LONDON, E.C.  
Bankers: London and Westminster, Lombury.

**M. R. W. H. COULELL,**  
No. 42, CORNHILL, LONDON, E.C.  
Daily price-list on application.

**WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS IN all descriptions of ENGLISH and FOREIGN SECURITIES, either for immediate cash or the fortnightly settlement.**

Recommend the purchase of shares in the VAN MINE, undoubtedly the richest lead mine, and the safest investment known.

W. T. has business in Cornish shares, and pays particular attention to the Brazilian and Californian Gold Mine shares. From his long residence in the Brazils he is able to afford full information as to the prospects of the gold mines of that country.

**SILK AND CO., STOCK AND SHARE BROKERS,**  
CHIEF OFFICES: 32, REGENT STREET, PICCADILLY, W.  
CITY OFFICES: 36, MARK LANE, E.C.

We are prepared to negotiate the Purchase or Sale of Stocks and Shares in Consols, Foreign Bonds, Railways, Insurance, Banks, Gas, Mining, and other Companies.

**M. R. J. B. HAWKES, 2, CROWN COURT, THREADNEEDLE STREET, E.C., has FOR SALE the following shares:—**

10 W. Tankerville, £2 2s 6d. 10 Siray Park, 42s.  
20 No. Croft, £3 1s. 9d. 10 Port Phillip, 17s. 9d. 10 Lovell Consols.  
20 Cefn Consols. 30 Rossa Grande, 18s 9d. 3 Tankerville, £1 1/2.  
15 W. Trellwyn, 6s. 9d. 5 St. John del Rey, £2 10 10 Van Consols, 24 1/2.  
50 Wheal Crebor, 15s. 3d. 60 W. Pant-y-Go, 2s. 20 Bwadrain Consols.  
15 Hammatt. 20 W. Tankerville, £2 2s 2 1 Devon Consols, £1 1/2.

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Our long experience has taught us to deal with caution. We act accordingly.

Investors can make money, and for safety they should do their business only through us.

We advise capitalists and Investors to make immediate application for shares in the Terra's Tin Company (Limited) and the Aberdaunant Lead Mining Company (Limited). The former, in Cornwall, will rise to as many pounds as now selling for shillings; the latter, in the Van district, will be the next great prize in Montgomeryshire. Letters and telegrams receive prompt attention.

ENDEAN AND CO., 85, Gracechurch-street, London, E.C.

Twenty-five Years' Experience.

**M. R. F. W. MANSELL, STOCK AND SHAREDEALER,**  
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

To save heavy loss, F. W. M. should be consulted by Investors before embarking their money in the rubbish now so strongly recommended by interested parties.

Daily List published every evening in time for post will be regularly forwarded to those favouring me with their business (free).

Bankers: London Joint-Stock Bank.

**M. ESSRS. J. HUME AND CO., STOCK AND SHAREDEALERS,**  
74, OLD BROAD STREET, LONDON, E.C., have BUSINESS IN—  
Closing Prices, Friday.

Prince of Wales ..... £ 7/2 to £ 1. Asheton ..... £ 8/1 to £ 2 9  
Prince's Kitchen ..... 14 " 14/2 Penrhyn ..... 6/2 to 6  
Tin-croft ..... 38 " 35 Penrhyn ..... 29 " 31/2  
Great Vor. ..... 11/2 " 12 Van Consols ..... 4/2 to 4 1/2  
East Lovell ..... 26/2 " 27/2 Pacific (Gold) ..... 6/2 to 7 1/2  
Drake Walls ..... 28 " 30s South Condurrow ..... 3 " 3 1/2  
Marka Valley ..... 6/4 " 6/4 Sweetland Creek ..... 1/2 " 1 1/2  
New Lovell ..... 2 " 2/2 Tankerville ..... 17/2 " 18 1/2  
West Maria ..... 26 " 27s West Tankerville ..... 3 " 3 1/2

**EAST WHEAL LOVELL.**—We are BUYERS at closest market prices, and at full value for cash or account, notwithstanding the rumours circulated.

BUYERS also of PRINCE OF WALES, TANKERVILLE, and WEST TANKERVILLE.

The "Investment Record and Mining Review," price 6d. May issue in a day or two.

Bankers: The London Joint-Stock Bank.

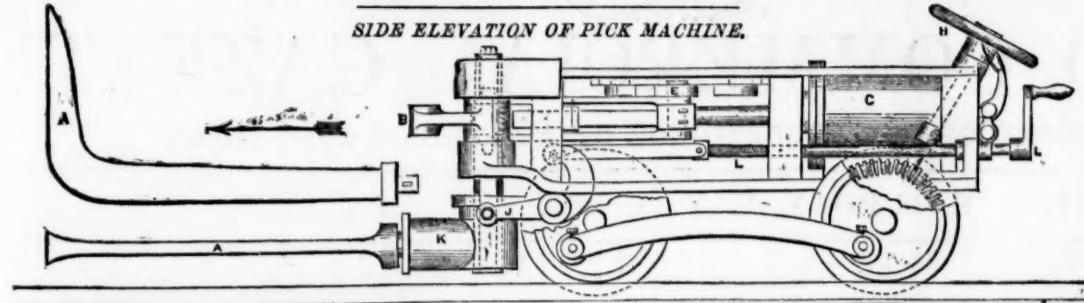
**M. R. HENRY MANSELL, STOCK AND SHAREDEALER,**  
1, PINNER'S COURT, OLD BROAD STREET, LONDON, has FOR SALE, at net prices, for cash, the following shares:—

100 Virtuous Lady (offer wanted) 50 North Croft, £3 7s 6  
10 M. Ann, £1 1/2. 60 So. Condurrow, £2 1/2. 10 W. Chiverton, £2 1/2.  
100 Prince of Wales 18s 3 100 Pant-y-Go, 21s 9 20 Pacific, £2 1/2.  
100 Head Agar, £2 1/2. 150 West Pant-y-Go, 21s 9 25 Great Retallack, £1 1/2  
10 Tan-yr-Alt, £2 1/2. 20 Llanarmon, 21s 9 25 North Trevodoe, £1 1/2.  
30 Bronfloyd, £3 16s. 3d. 20 Hammett, 21s 9 30 Pen'Alt, £2 1/2.  
30 East Lovell, £2 1/2. 30 Nantose Consols, 20s 6d. 30 Bwadrain Con., £2 3/2.  
30 Great Rock, £7 1/2. 30 Great Vor., £1 1/2. 30 Excelsior, 20s 6d.  
30 Hammett, 21s 9 30 Van Consols, 20s 6d. 30 Harewood Con., 7s 6d.  
30 Chontales, £1 12s. 9d. 30 East Caradon, £4 1/2. 30 Cefn Consols, £5 1/2.  
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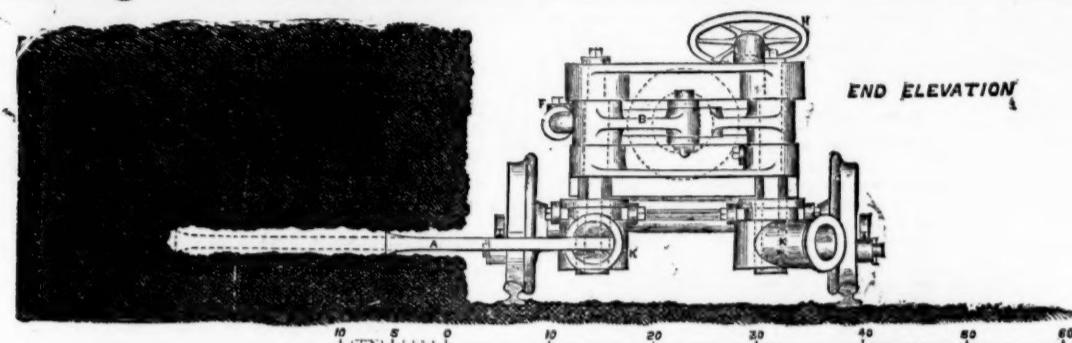
[MAY 14, 1870.]

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Double Shear Steel; Spring Steel; Blister Steel; Files.

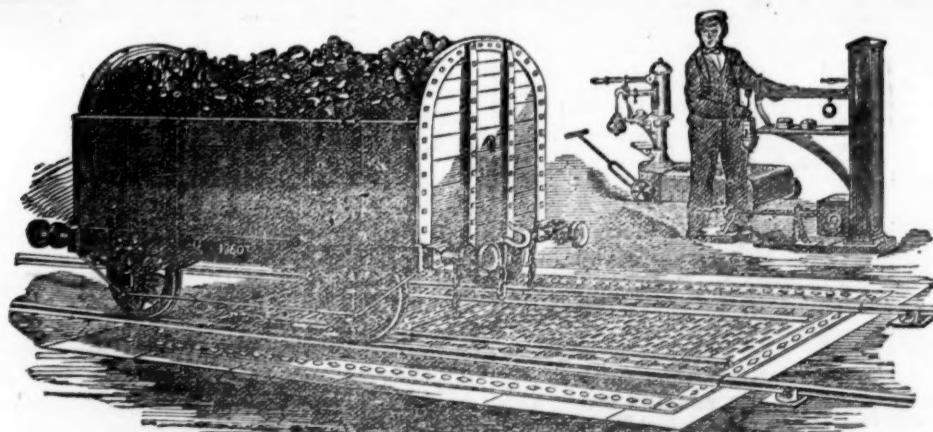
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### Original Correspondence.

#### THE MINES REGULATION BILL.

SIR,—Will you kindly allow me to ask, through your columns, the mine agents who have not answered my recent circular to do so as soon as possible, and, lest they should have lost the circular, permit me to repeat the questions asked:—

Name of mine.

Number of children working under 12 years of age.

" " over 12 under 13.

" " 13 " 14.

Number of above who can read but not write.

Number who can both read and write.

Penzance, May 11.

THOMAS CORNISH,

Secretary of Committee.

#### ON CRIMES OF OUTRAGE BY TRADES UNIONISTS.

SIR,—Since I last addressed you on working men's questions the complaint I made against Trades Unions, of not rejecting and denouncing coercion as a means of filling their ranks, has received mournful illustration in outrages in Sheffield and Manchester. A very short time now will pass before it will be seen whether my forebodings, that this lamentable shortcoming of the leading men of Trades Unions would put them out of Court when their case came before Parliament, was true or not. They will soon find to their cost that the House of Commons will not for a moment sanction terrorism or intimidation as interfering with the free right of every working man to fix the rate of his day's work. I deeply regret that the utter unworthiness and incompetency of their leaders will damage the cause of the working men when they come to ask for the freedom of association for self-defence they are so well entitled to. To leaders such as those who now guide their councils assuredly nothing will be granted; the only anxiety will be so to restrain them that they may be unable to break the law, or do mischief. The absurdities of the so-called "International Working Men's Association" (mixed up with politics out of date here), advocating democracy and much nonsense of that kind, do not deserve much of my time or attention. Their supporters are much of the same class as the Fenian sympathisers, and just as sanguine in striving to advocate a state of things which, by destroying security, would (if it could possibly succeed) reduce working men to poverty, from the destruction of the establishments which furnish employment to pay wages.

A MAN OF EXPERIENCE.

#### THE COMPOUND ENGINE.

SIR,—"Coalmaster," in the Journal of last week, brings to notice an erratum in my paper, published in the Supplement to the Journal of April 30, on the Compound Engine, committed by myself. Instead of writing "applies to engines with slow piston-speed, and having no fly-wheel," it ought to read, "applies to engines with slow-piston speed, or having no fly-wheel." I think it is not fair to quote the speed of piston through a portion of the stroke only, and that, too, under the most favourable circumstances—whilst the full initial force of the steam is acting. In my opinion, the mean, and not the maximum, speed ought only to be considered. Of course, the "Cornish" Engine is a special type of itself, and generally admitted to be the most economical for pumping and winding purposes, but quite inadmissible in marine engineering, where 80 or 100 revolutions, or even more, are required per minute. Even with this rate we seldom exceed a mean piston speed of 800 feet per minute. Steam-jacketting the cylinder covers, as proposed by "Coalmaster," is not at all new, and his further suggestion of applying this principle to the piston is not bad, if it can be done without involving any complication, which I rather question.—Middlesborough, May 11. G. R. MORDUE.

#### DYNAMITE.

SIR,—I have read the letters of your correspondents, "W. O." and "A. R. R. O." respecting the use of Dynamite. As to the safety of this blasting compound, I can fully endorse all that has been said in favour of it, having made several experiments; and I am perfectly satisfied that Dynamite is one of the strongest blasting agents yet discovered; but in consequence of the alleged injurious effect it is supposed to have upon the health of the miners, causing very severe headache, I find it impossible to induce them to use it underground.

EDALEK.

#### THE WESTPHALIAN IRON TRADE.

SIR,—A correspondent of the *Berlin Exchange Gazette* writes that as the question of the abolition of the duty on raw iron and the diminution of duty on other kinds is revived, it may not be inopportune to take a glance at the rate of returns which the Westphalian iron trade has given for a series of years, according to statistics furnished of the business results of the smelting works from the year 1863 to the present time:—

For 1863 to 1864, average rate of dividend .....	5½ per cent.
1864 to 1865 "	7½ "
1865 to 1866 "	8 "
1866 to 1867 "	(the war) 7 "
1867 to 1868 "	7½ "
1868 to 1869 "	9½ "

From these figures it is clear that the iron industry of Westphalia has, with the exception of the year 1866, steadily progressed, and, in a financial point, has attained to that position that capital will more and more be invested in it; and to what an extent of development it is yet capable the following figures, which give the production and consumption of iron per head for 1865, will enable us to judge:—

The production in England amounted to 300 lbs. per head; in North America, 75; Belgium, 100; France, 60; and the Zollverein, 36. The consumption in England and North America each 100 lbs.; Belgium, 65; France, 53; and the Zollverein, 38 lbs. With the exception, therefore, of Austria, Russia, and the South of Europe, the Zollverein stands last of the great iron industrial powers, but is capable—as is well proved in the last few years—of a very largely increased production. The iron industry of Westphalia is especially flourishing, and all the smelting works are full of work. The railways, as also private wants, absorb a large quantity, and future prospects are most favourable. The demands from England for speigelsen can hardly be satisfied. Here, then, is a good opening for English enterprise and capital.—Bonn, May 6.

#### RHENISH PRUSSIA—No. X.

SIR,—The prospectus of the Phoenix Mines, which appeared in your advertising columns of last week, induced me to visit this most interesting district, in the centre of which, and near to the village of Muck, the mines are situate. Here I was courteously received by the director, Herr Jäger, and the Oberjäger, with whom I carefully inspected the mine at surface and underground. There are very many rich lead mines in the district, which I shall not now particularise. To the south, and about a mile distant, at Marbach, an old mine, abandoned from want of sufficient engine power, has been resumed, in which a course or lead of very great value was immediately opened upon, and all is now activity, two steam-engines being at work, and the well-known German lead-dressing machinery is being erected there. On the Phoenix Mine are, as described, steam-engines for pumping, hauling, and dressing. These are all well located, and adequate to the sinking of the mine to more than double its present depth, and to the hauling and dressing, with very slight additions, of more than four times the amount of ore at present raised. The shaft has been so placed that it will intersect the lode at about the 65 fm. level under adit. The deepest point in the mine is 41 fms. This level is being extended on a lode 18 to 20 feet wide, under the courses of ore, which have been continuous and extending in length in all the upper levels from near the surface to the present level. Since the reports attached to the prospectus were written a side lode has been discovered, 4 to 6 ft. wide, with a leader of lead 1½ to 2 ft. wide; this is in whole ground to surface. In the stope referred to in Captain Rickard's report as carrying "a leader of solid lead, 4 in. thick at the hanging wall, and near the foot wall two leaders of 1 ft. 3 in. and 1 ft.," and making together 2 ft. 7 in. of solid lead, an improvement has taken place, and there is in this stope a leader certainly 4 ft. wide of solid lead. As it is certain that 1½ in. of lead will turn out 1 ton to the fathom, and that the average value of the lead is 13/-, your readers can judge of the worth of the lode at this place, which bids fair to equal in value its neighbour, Ludrich, in which recently another immense course of lead ore has been dis-

covered, and this mine alone supplies employment sufficient for its own great smelting works.

I am well acquainted with the Cornish agents who have reported, and as their reports indicated certain points of interest, particularly the probability of the discovery of the Phoenix lode on the eastern side of the cross-course, knowing the character of the country, I entertained no doubt on this point, and the fact that the same cross-course within a few fathoms had dislocated the parallel lode, the Onyx, only a few fathoms, and that the lode in the Ajax Mine, both in the same set, had been cut east of this cross-course, it did not, in my mind, admit of a doubt that the like cause would produce like effect on the Phoenix lode, and such has proved to be the case. At a distance corresponding with the dislocation of the Onyx lode, the Phoenix lode was discovered east of the cross-course, and with it a good course of lead, producing  $1\frac{1}{2}$  to 2 tons of lead and 3 tons of excellent blende to the fathom; and as there are old surface workings to the eastward, it is certain that this lode continues in that direction, and that when it is freed from the influence of the cross-course it will be equally rich with the lode westward. This discovery being made in whole ground, there are over 40 fathoms of backs to be taken away above this level. On these three levels can be extended at the rate of 6 fms. per month, thus opening up ore ground at the rate in aggregate of 18 fms. per month, each 10 fms. high, or together 180 fms., which would lay open, at 1 ton per fathom, 270 tons of ore per month, at £3 per ton—35000£ monthly, or 42,000£ per annum. To develop the Phoenix and the Onyx lodes a cross-cut should be driven at the 31 fm. level, which would, at small cost and without interfering with the deeper workings, effectually prove these lodes, as well as the intervening ground.

The director, Herr Jäger, and the Obersteiger on the mine both state that the leader of lead is 5 ft. wide, solid, and I can positively assert, from personal observation, that it is from 4 ft. to 5 ft. wide. Taking, then, the average produce of the lode for the 23 fms. at only 24 tons per fathom, and you have backs laid open 10 fms. high, or 230 fms., producing, at £3 per ton, 71,700£. By sinking the shaft and extending the levels a like quantity of ground may be laid open and taken away, giving a return from this part of the mine only of 143,400£ worth of ore. There is also here a leader of blende, 3 ft. wide, worth 5£ per ton: this of itself, at the shallow depth of 41 fms., would make a profitable mine. But leaving the blende out of the question, and taking no credit for the lead to be raised from the parallel lode recently discovered, it may be fairly estimated that in the first year ore will be returned from the lode east of cross-course

To the value of .....	£42,000
From between the cross-courses .....	143,400
Total .....	£185,400
Monthly cost 800£, on these increased returns.....	9,600

Leaving net profit on the first year's working ... £175,800

May 4. — OUR CORRESPONDENT.

#### MINING IN PRUSSIA, AND IN ENGLAND.

SIR.—Your "Correspondent," in the *Mining Journal* of April 16, makes the following statement:—"Alderley Edge Mine, in Cheshire, where the average quality of the ore does not exceed  $1\frac{1}{2}$  per cent. produce, the company, availing itself of the acid process, has returned all its capital, and is now making large profits;" and adds that both the acid and the scrap iron necessary for this process being very much cheaper in Prussia than in England, the advantage of investment in Prussian mines, &c., is obvious." He further states that the Government dues being only one-fiftieth, must also be an inducement.

To these advantages I can add two very important ones—the extent of mining grants in Prussia, and the perpetuity of them. Mining property is not held in the North German empire on lease for a few years, as in England, from the landlords of the soil, but from the Government in perpetuity, or equivalent to it. The concessionaire can dispose of it, and a foreigner hold it as well as a native. Should the mine be set to work the owner, if in the country, may nominate himself as the representative, or person with whom the Government officials communicate; or, in case of his non-residence, he must nominate a party resident to act for him. The official superintendence is limited to the seeing that the mine is worked with due regard to its security, and the safety of the workpeople; and externally with safety to the public—no old shafts allowed open, &c. The extent of the concession is not a few hundred fathoms, but 300 or 400 acres.

There is a great future for mining enterprise in this country, but it can only develop itself with the extension of the railway system. Though the country abounds in iron, iron must be imported, and is to come in duty free, as the carriage of their own is too costly.

X.

#### MINING IN SHROPSHIRE.

SIR.—The paragraph appearing in the *Mining Journal* of April 23, under this title, is a misrepresentation of facts, and is calculated to mislead the public, in so far as it states that the property secured is coupled with the Leeds Rock House Lead Mining Company (Limited). The proprietors of that company know nothing whatever about neither have they any connection with, the Kinnerton Company or not. By kindly inserting this, you will oblige—

Shrewsbury, May 10. — EDWARD GLEDHILL, Manager.

#### IRISH RAILWAYS.

SIR.—As I know the importance which the readers of the *Mining Journal* attach to the full development of the railway system in Ireland, and the benefits likely to result from cheap fares and freights, as well as from consolidation of management, I ask the favour of your permitting me state that a few months since a plan was submitted to the Premier and Mr. Bright, of which the subjoined is a brief abstract:—

Purchase of Irish Railways by the State for (say) 20,000,000£, by annual payments, to include principal and interest at  $4\frac{1}{2}$  per cent. per annum, spread over forty years—=£1.8s. 4d. for every 100£, or 883,333. £s. 8d. per annum, to pay off the 20,000,000£ in forty years.

In 1867 there were 1928 miles of railway open, and the receipts from all sources were 1,872,619. The working expenses were 982,065£, leaving 890,554£ to pay dividend and interest on share and loan capital, amounting in all to 27,400,601£, equal to a return thereon of  $3\frac{1}{2}$  per cent., assuming all capital receiving benefit. If my figures be exact, if the State purchased the railways on the plan herein suggested, at this rate of interest, without taking any credit for the saving in management by consolidation, and supposing the earnings did not increase, there would be an annual surplus spread over forty years of 7221£.—890,554£, the net earnings; 883,333£, the terminable annuity—7221£, the surplus.

I will now proceed to explain my ideas in the matter more fully:—

Firstly, I shall assume that having regard to the interest of all concerned, the terminable annuity for the purchase should only be spread over twenty-five years (the rate being the same,  $4\frac{1}{2}$  per cent.); the charge on every 100£, will then be 67. 8s. 4d., or—1,983,333£ per annum to pay off the 20,000,000£. In twenty-five years; and assuming there would be no saving by consolidation of management, this would show an annual deficiency of 392,779£, spread over twenty-five years. But assuming a saving or additional profit of 10 per cent. on the gross annual receipts by consolidation of management, on 1,872,619.—187,362£, leaving a deficiency of earnings for payment of terminable annuity of 205,517£. And, secondly, I shall assume the terminable annuity for the purchase to be spread over 40 years, as first suggested, and allow for extra profit by consolidation of management 187,622£, leaving the net annual earnings 1,077,861£, out of which to pay 883,333£, the amount of the terminable annuity, leaving a surplus of 194,488£ towards reduction of the local rates of Ireland.

It is stated that the Premier is opposed to managing the Irish railways by means of a Government executive department: but a railway managing board can easily be constructed for such a purpose, under which Ireland would have the full benefit of ownership and control ultimately of her railways, and by agreeing to a "rate in aid" for any annual deficiency she would, after 25 or 40 years, as may be decided on, receive the benefit of the earnings of her railways for reduction of the cost of maintaining the roads and bridges, &c., throughout Ireland, after reducing railway fares and freights to the lowest possible scale. Assuming a rate in aid of 4d. in 17. on the probable ratable property of Ireland, (say) 10,000,000£, it would yield 206,665£, sufficient to meet the deficiency for payment of the terminable annuity, if to be paid off in 25 years. No doubt it will never be requisite to strike such a rate, as in the opinion of those best qualified to judge the effect of a reduction of the rates to 50 per cent. of the present charges will be that the profits or earnings will, in a few years, greatly increase and far exceed present profits.

In 1867 the Grand Jury of Ireland was about 1,083,000£, so that if the payment of the terminable annuity as proposed for 40 years were adopted, the effect would be the gradual reduction of the Grand Jury Cess in conjunction with the benefits to the nation resulting from low fares and freights, and probably its ultimate extinction, after 40 years, by means of the profits of the railways

of Ireland. It is considered that, to complete the construction of railways in Ireland so as to give full effect to the system, it will be requisite to expend 6,000,000£, in the course of (say) the next three years, and it is hoped that the Government may make such advances on the security of the railways to be constructed, and by "rate in aid" repayable after opening out of the earnings in the same manner as suggested for the repayment of the 20,000,000£ for the purchase of existing railways. If the railways be constructed out of the 6,000,000£ sought from Government as a temporary loan, could all be completed in three years, the loan being issued (say) at a discount of 3½ per cent., or for the three years (the advance being made quarterly) at a charge of about 300,000£, the repayment by the means of the suggested terminable annuity would commence at the close of the fourth year.

I have not ventured into any details of the machinery by which the railway board of management shall be established, as this will be purely a matter of legislation. I merely presume to offer a suggestion for consideration of those whom it may concern, and who will take the trouble of reading this.

London, May 10.

RICHARD F. MULVANY.

#### BRENTOR, AND VIRTUOUS LADY MINES.

SIR.—Will you allow me to corroborate the statements recently made by Mr. Barnard, in reference to the first of the above mines? As a shareholder in the late company, I wish to state that the money has been returned in full to the various shareholders, and that although the further prosecution of the mine is stopped, it is but for a time only, and that a bona fide intention exists of resuming operations at a future day. I do not know why Mr. Barnard's statements should not be accepted without reserve, but that gentleman has evidently a goodly number of enemies (and some of them by no means inactive); an independent corroboration, therefore, of his statements on this subject may not be unacceptable, particularly to the large number of the shareholders in the Virtuous Lady Mine. A determined and deliberate attempt has been recently made (by the sending round of circulars, and other means), to excite a panic among the whole body of shareholders in the latter mine. The delay in opening up some of the different points of the mine has afforded an opportunity for inserting the thin end of the wedge, and a vigorous effort has been made to drive it home—happily without success. Notwithstanding the failure of this reprehensible attempt, however, the shareholders will, doubtless, be glad to receive from one of their own body a confirmation of the reports made recently on the property by the different mining agents, which have appeared in the *Mining Journal*. I visited the mine recently, and passed several hours above and underground. Since a former visit a great deal of work had been done, and thoroughly well done, at surface. The rough-and-tumble look of the place, due to what one might term the lubberliness of the former workers, was no longer visible—order had succeeded to disorder; while the aspect of the place was changed, and presented every appearance of earnest operation. I had the pleasure of seeing the crusher set in motion, and the action of the machinery to be perfect throughout. Several heaps of ore were waiting to be crushed, the first sample from which, I see, has been sent to market.

Underground the old workings were turning out ore at several different points. The new points—the driving the cross-cut to intersect the south lode, the sinking the engine-shaft, &c., were being prosecuted with vigour, and altogether the whole appearance of the mine, both at surface and below, bore the unmistakable impress of sound and vigorous management. I left the ground with my conviction of the brilliant prospects of the mine (notwithstanding the unavoidable delay which has attended some of the operations, and for which the management is in no way responsible) renewed and strengthened. No one in his senses could descend, and go through the immense excavations, without being convinced that an enormous amount of mineral must have been got from them. People do not make incisions of such dimensions in the solid rock except for the ore found, and, as none of these excavations are deeper than 17 fms. from surface, the next level may be confidently relied on, when reached, to turn out large masses of ore, the counterpart of those removed from above. To use a familiar illustration, the uppermost layer of ore has been removed by the former workers. The present proprietaries are sinking to get at the next layer, which will, in due time, be brought to light, to be, no doubt, followed later by deeper deposits; in addition to which there are lodes (not one, but several), as the south lode, to which a cross-cut is now being driven, from which not even the upper layer has yet been taken away. The whole situation, in fact, is permeated with lodes, and time only is required to lay open their treasures.

As few, perhaps, of the large body of shareholders can find it convenient to satisfy themselves by personal inspection, from time to time, of the value of their property. It will, doubtless, be acceptable to them to receive through your columns, from one of their own body (and one who by an unswerving hold of his interest has proved his sincerity), the impression produced by his recent visit, whilst it is gratifying to him to find his original opinion of the mine confirmed by the reports of inspectors of such undoubted respectability as Captains Williams, Henty, &c.

I regret that want of time did not permit me to inspect the Queen Silver Mine, or I should have been happy, for the sake of my brother shareholders in the Virtuous Lady, to have given them my opinion thereon. From what I heard, however, strengthened by the recent reports in the *Journal*, coupled with my personal knowledge of some of the men principally interested, I have no doubt that a great success is certain. With the application of the more expert and economical methods of extracting the precious metals adopted in America and other countries, there seems no reason to doubt that ore of the value of that produced by the Queen must realise very handsome profits to the proprietors. I have taken a considerable interest, and hope for better returns than from some of my foreign gold speculations.—May 11.

VIGIL.

#### THE QUEEN, AND THE PRINCE OF WALES MINES.

SIR.—In the latter part of March you were kind enough to insert a letter from me, remarking on the apathy of the executive of the latter mine in neglecting to open upon the silver lode known to be passing through the sett. The week following a correspondent in the *Mining Notabilia* replied, advising the company not to make any trial on this lode, but to confine their efforts to developing the copper. I have delayed making any observations thereon until now, in the hope of acquiring more information, and at the same time to watch the progress making on the silver lode by the former company. Last week's *Journal* supplies this information, and amongst other reports, all speaking favourably of the former mine, I extract the following from the report of the agent of the latter:—"Many hundreds of tons of muriatic and copper have been returned from this part, and in the western part it has been partially wrought on to a depth of from 8 to 12 fathoms for silver ore, and above 700£ worth of which has been sold by the present company at a comparatively small cost, and another parcel is being prepared for market."

The western part to which Captain Gifford refers is, I apprehend, near to the Prince of Wales boundary; and seeing a lode so productive of silver ore so shallow, and at a comparatively small cost, surely I may ask—"Ought such a property to be utterly ignored, and no trial whatever made?" Hundreds of instances can be cited where discoveries of immense value have been made by re-working abandoned mines, simply for want of trifling exploratory operations. This silver lode is known to be productive east; and to the west, some years ago, large deposits of silver ore were found and returned. If it is a settled fact the lode in our sett is poor, I would, rather than act "dog in the manger," offer the ground to the proprietors of the Queen, who would, in all probability, be too glad to avail themselves of the privilege of working it, and so gain access to their western ground. Might they not be induced to give us some consideration for the ground, which, under present circumstances, would be useful?

#### THE JAVALI COMPANY.

SIR.—In the report of the meeting of the Javali Company, which appeared in last week's *Journal*, it was stated (by a slip of the pen) that a resolution recommending that the unissued shares of the company be offered to the shareholders pro rata, and at a reduced price, was "carried unanimously"; whilst, on the contrary, it was not carried, and it is uncertain how far the holders of such shares could be protected from liability for the amount which would be really unpaid thereon. The board and committee of this company have, therefore, resolved to recommend that the necessary capital now required should be provided by the issue of preference shares, bearing continued preferential interest of 15 per cent. per annum, but entitled to the same dividend as ordinary shares in any year when dividends exceeding 15 per cent. are declared.

B. SEEMANN,  
Managing Director.

#### THE JAVALI COMPANY.

SIR.—Allow me to request some correction of your report of the few words I spoke at the meeting of the Javali Company on April 29. I said that I did not know Mr. Bird personally, but that as we came from the same part of the country I had been in the habit of hearing of him for many years past, and what I had so heard led me to place no reliance whatever upon his unfavourable report. I suggested that he should be suspended from all control of the mines, and invited to England to substantiate his report, but not dismissed unless that report should prove, after enquiry, to be unfounded. I pointed out the impropriety of dismissing an agent simply on account of an unfavourable report.

E. H. WALKER,

IMPORTANT DISCOVERY AT ERGLODD WOOD AND VALLEY, CARDIGANSHIRE.—For many years past, in farming the lands of Mr. J. M. Davies, on each side of the high road between the villages of Taliesin and Talybont, large blocks of silver-lead ore have been found, some of them weighing hundredweights in a block. One of the largest is said to have been sent to the Exhibition of 1851; another, weighing nearly 2 cwt., is to be seen at the present time in the garden adjoining the residence of the above-named gentleman. A cart load of pure metal was taken at one time to the crusher of the Alt-y-Crib Mine, Talybont, by the farmer, which had been ploughed up from time to time; and the road-maker on another occasion took a wheel-barrow full of pure lumps of silver-lead ore to the Penpontren Mine, which he dug out of the ditch by the side of the road. Notwithstanding these facts indicated a large, rich lode running through the property, it does not appear that any search was made in the immediate vicinity of these discoveries for such lode, although mining was carried on by private parties in the neighbourhood, and it is said that as long ago as the time of Sir Hugh Middleton the district was productive of rich silver-lead ore, the Baronet himself having worked at great profit the old Alt-y-Crib Mine adjoining. Another important circumstance is the fact that the mountains to the north attained the name of Brynarian, from silver ores found in it, while the valleys to the south of the said valley were found to have been worked for silver-lead ores from the earliest records of mining in the district, but the valleys appear to have been disregarded, nor were the veins in either mountain opened out lower down the sides approaching the valley. Recently systematic search by mode of coepting, as pursued in Devon and Cornwall, has been going on in the expectation of finding the rich lodes from which the rocks of one found in ploughing the fields were detached; and last week a discovery was made which is likely to account for those hitherto unexplained deposits. On the north side of the valley, for an extent of many acres in a coppice wood, the land has been dug into deep pits, which must have been done prior to its being a coppice, and of which no record seems to be traced; but there can be no doubt the workers were richly rewarded from the detached ore they discovered, and which, as well as that found in the valley, doubtless came from the back of the large lode now quite open, which is more than 6 ft. wide, producing fine stones of silver-lead ore quite close to the surface. Upon this vein a level is commenced, which will

give 50 fms. of backs on the hill side, while another 50 fms. can be obtained from commencing in the valley below, the whole of which depth will be driven upon the vein, so that the result will be watched with great interest, and be recorded from time to time.

#### Meetings of Public Companies.

##### NATIONAL PROVINCIAL BANK OF ENGLAND.

The annual general meeting of shareholders was held at the bank premises, Threadneedle-street, on Thursday,

Mr. RICHARD BLANEY WADE in the chair.

The report of the directors was read, as follows:—

The directors have much pleasure in again meeting the proprietors, and presenting to them their thirty-seventh annual report, showing the result of the operations of the bank for the year 1869. From the statement of profits given below, it will be observed that the directors recommend that the rate of dividend now to be declared should be the same as was voted at the annual meetings in 1868 and 1869—4 per cent., and a bonus of 7 per cent., making (with the dividend paid in June last) a division of profits of 21 per cent. for the year 1869, and carrying forward 25,000£, of undivided profits.

This announcement the directors believe cannot fail to be satisfactory to the proprietors, as these gratifying results have been derived from a sound and gradually increasing business. Nearly 2000 new current and a large number of deposit accounts have been opened during the year. Seven changes occurred in the rates of discount of the Bank of England during the year, but the average did not exceed 32. 3s. per cent. The trade of the country, though more prosperous than in any year since the panic, still continued very depressed in several important branches of industry, while the agricultural interest suffered from the low price of corn, consequent upon large importations. The following is the summary of the operations for the year, submitted in the usual form:—

Jan. 1, 1869—Rest or undivided profits at Dec. 31, 1868, as exhibited at the annual meeting in May, 1869, viz. ..... £333,831 0 1

Bonus declared and paid in cash in July, 1869 ..... 75,600 0 0

Leaving ..... £268,231 0 1

Dec. 31, 1869—Net profits of 1869

course, no control. To show how very successful the former issue of shares had been in the result, he might state that in the year 1861 they had only 1125 proprietors in the bank, whilst at the present time the number was 2273, which showed what a great diffusion of the shares of the bank followed that increase of capital. What the directors now proposed to do was to issue 22,500 shares of 20*s.* each, at a premium of 10*s.* per share. It was proposed to call up 12*s.* on each share, in instalments of 2*s.*, with an interval of six months between each call; so that the whole increased capital will not be paid-up before January, 1873. The result of this operation will be that in January, 1873, the paid-up capital of the bank will amount to 1,350,000*s.* As regarded the premium of 10*s.* per share, 5*s.* would be payable when the first call is paid in next July, and the other 5*s.* in July, 1871. The amount of premium would produce 225,000*s.*, which it was proposed to put to the reserve fund, which would bring that fund to an amount exceeding half a million (*Cheers*). The directors had given their very best consideration to this important subject; and, if it were carried out, they believed it would place the bank in a position which it ought to occupy. Before sitting down he would express the deep regret which the board felt at the death of their esteemed colleague Mr. Maxwell; 25 years had elapsed since that gentleman was elected a director of the bank, and he laboured most indefatigably to promote the interests of the bank in every way possible, and during the last few years he undertook very important and onerous duties, which necessitated his coming to the bank almost every day. The shareholders would easily understand that the directors, meeting almost every day in the week, and being dependent upon each other for a thousand acts of good feeling and good nature, would feel very much the loss of so esteemed a colleague as Mr. Maxwell, and that feeling of regret was mingled with awe at his very sudden removal. Very shortly a special meeting would be called to fill the vacancy caused by the death of Mr. Maxwell. In conclusion, the Chairman read the report of the directors, and formally moved that it be received and adopted.

Sir I. S. D. SCOTT, Bart., seconded the resolution.

Mr. REEVES expressed his satisfaction with the report and accounts, and with the progress which the bank was making, but said he could not see that the proposed issue of fresh shares would be any advantage to the shareholders. For his own part, he should not mind a slight reduction in the dividend if it were thought advisable to add to the reserve fund, whilst it must be evident to all that by increasing the capital the probability was that the dividend would be diminished, as the amount of money earned would have to be divided over a larger amount of capital. At any rate, he thought the subject should be allowed to stand over until the extraordinary meeting, in order to allow the shareholders to more thoroughly look into the subject.

Mr. AUSTIN reminded Mr. Reeves that it was very important to bear in mind that the public must be considered, and there was no doubt that an increase of the capital would largely increase the confidence now reposed in the bank.

Mr. CASTELLAN also heartily concurred in the desirability of increasing the paid-up capital; there was no doubt that an increase of capital would result in an increase of prosperity to the bank.

A SHAREHOLDER asked whether it would not be possible to assimilate the shares one to another?

The CHAIRMAN, in reply to the above and other questions, said that the board were pleased to hear the shareholders seemed to be almost unanimously with the directors in favour of a fresh issue of shares. There was no doubt that the time was now come when it was most desirable, looking at the large amount of the bank's indebtedness to the public, that the capital should be increased. As regarded the assimilation of the shares, the directors had most carefully considered that question, and at present they could not see their way to its being carried out.

The resolution was then put to the meeting, and carried unanimously.

The retiring directors, the Right Hon. Lord Earle Agustus Charles B. Bruce, M.P., Mr. H. Pauli, and Mr. R. B. Wade, were then re-elected.

Lord BRUCE acknowledged the re-election of himself and his two colleagues, and said that the directors would in the future, as they had done in the past, do the best they could to advance the interests of the bank.

The Rev. Mr. BAILEY said he had a resolution to move which he was sure would command itself to all the shareholders. Whilst the bank had gone on increasing in prosperity the remuneration of the directors had not been increased in proportion, and he thought that the time was now come when an addition ought to be made to the directors' remuneration, seeing the great time and attention those gentlemen paid to the bank. Under those circumstances, he moved—"That the present remuneration of 5800*s.* (which was fixed in 1858) be increased to 7000*s.* a year."—Mr. TOWNSEND seconded the resolution.

Capt. GRANT said he thought that, considering the great value of the services rendered by the directors, their remuneration should be increased to 10,000*s.*

Other shareholders expressed their warm concurrence in an increase of the directors' remuneration, and the general feeling seemed to be that 8000*s.* a year was a fair and reasonable sum to offer the directors.

Mr. BAILEY accordingly amended his resolution by inserting "8000*s.* a year," and this was put to the meeting and carried amidst loud cheers.

The CHAIRMAN, on behalf of the board, acknowledged the increase of remuneration, and expressed the great gratification which the directors felt at this increased mark of confidence.

On the motion of Mr. AUSTIN, seconded by Mr. CASTELLAN, a cordial vote of thanks was then passed to Mr. Atkinson and Mr. Holt, the general managers, and to the staff generally, for their very efficient services during the past year.

Mr. ATKINSON, on rising to acknowledge the compliment, was loudly cheered. He said that this annual expression on the part of the shareholders was a very great encouragement to the members of the staff. The guarantee scheme for the officers which had been introduced into the bank would, he believed, work well for the interest of all connected with the institution, and he hoped that in the end it would terminate in some benevolent scheme which would still more benefit the officers. With respect to the issue of fresh capital, there was no doubt that the time was now come when it was extremely desirable, in the interests of the Bank, that fresh shares should be issued; the effect would be to inspire still more confidence in the minds of the public, and it would also result in a very substantial addition to the reserve fund. In conclusion, he urged upon the shareholders the desirability of doing all they could to assist the directors in promoting the interests of the bank.

On the motion of Mr. REEVES, a vote of condolence was passed to the widow and family of the late Mr. Maxwell.—A cordial vote of thanks was then passed to the Chairman, and the meeting broke up.

#### BRAGANZA GOLD MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices, Coleman-street Buildings, on Tuesday.

Mr. MORRIS in the chair.

The notice convening the meeting having been read, a statement of accounts was submitted.

The CHAIRMAN congratulated the shareholders upon the encouraging prospects which their mine presented, in a so unprecedented short period of time, compared with those of any other of the Brazilian mines hitherto brought before English shareholders. He stated that, taking into consideration the short time their superintendent and staff had been on the property, in a country where new mines had many difficulties to contend with, it was marvellous to think of the results already arrived at—having erected and established shelter for the labourers, having ascertained that the alluvial deposits were auriferous, and proved by the two or three lodes cut to be productive of gold in quantities, which will pay very handsomely, one of the lodes being 4*fms.* wide, yielding 4*ozs.* to the ton, a sample of the gold from which was exhibited at the meeting. He further informed the meeting that their superintendent had been successful in purchasing a small stamping mill in the neighbourhood, at a nominal outlay, which he had no doubt was by this time in full operation, and by which the manager had informed the directors he hoped to be able to make returns immediately.

A vote of thanks was passed to the directors and secretary, when the usual compliment to the Chairman closed the proceedings.

#### ROSSA GRANDE GOLD MINING COMPANY.

The fifth ordinary general meeting of shareholders was held at the London Tavern, on Thursday.—Mr. HENRY HAYMEN in the chair. The report of the directors stated that it is encouraging to note that in Capt. Treloar's opinion the improvement in the Mina da Serra is decided and satisfactory—that it is now a fair paying mine, and that the lode in the deepest part is opening out well. The development of the various lodes has been again seriously retarded, owing to the scarcity of labourers. The conclusion of the war with Paraguay will, it is hoped, enable an adequate force to be obtained, so that during 1870, in addition to the extension of the Mina da Serra, the Bahia, Cachoeira, and Caco lodes may be eventually opened up. So far the expectations held out relative to Gongo Soco have not been realised. This property is being carefully and economically explored, and the shareholders are already in possession of Capt. Treloar's last report, advising that on March 7 he took promising samples of gold, 30 fathoms west of Angove's shaft. As is the case in auriferous jacutinga lodes, important discoveries may at any moment be made. The gold return for the year has amounted to 16,301 ols., or 1879 ozs. troy, and has realised 7030*s.* 1*ds.* 1*ld.*

The CHAIRMAN said, when he last had the pleasure of addressing the shareholders he was in hopes that the Paraguayan war would quickly have been at an end. Everything seemed to facilitate the progress of the Brazilian army, and everybody felt certain that the army of Lopez would be annihilated, and that tranquillity would be established in the empire. Although, unfortunately, the calculations were out as to time, it is satisfactory to find that the war is now actually at an end by the death of Lopez, and that tranquillity is in Brazil has been established. The directors had hoped to have been able during the past year to announce the gratifying intelligence that Gongo Soco had turned out a great prize. The monthly slips forwarded to shareholders had enabled them to judge as to what had been done, and he could assure them that none had felt more deeply the failure of finding gold as originally anticipated than he (the Chairman). But, although they had failed in finding gold at the spot anticipated, there was very little doubt gold would ultimately be found in connection with the jacutinga formation in the Gongo property. Shortly after he and his colleagues joined this company they worked the jacutinga belonging to the Rossa Grande Company proper—that is, the old Rossa Grande estate; and one of the reasons which induced them to purchase Gongo Soco was the fact that Captain Thomas Treloar was of the opinion that the extent of the jacutinga up the Rossa Grande proper was so small that if gold were found it could never be worked to any extent upon that section. Ultimately Gongo was bought; and he believed that, notwithstanding all the difficulties, gold would be found in that property sooner or later, and in such amount as would make ample amends for the present failure. As to the Rossa Grande property, a very great improvement had taken place, so great, indeed, that if it had not been for the other mines, instead of what may be called a meagre balance-sheet, inasmuch as there was no dividend, a most satisfactory dividend would have been announced. No one could foreseen that they would have been so short of labour; every exertion had been made to obtain force, but they had not been able to do so. It was true that the result of their operations at the mines had not yet been very brilliant nor satisfactory, but with a mine yielding such a large percentage, if they could only get the other

mines to pay, irrespective of the Gongo explorations, the company would pay considerable dividends. He had heard it stated that this company had been sacrificed for other companies, and he wished to take this opportunity to state that such an opinion was contrary to the fact. The Rossa Grande property, as regarded labour, was situated in the worst possible position compared with other mines, and all the labour had been got that could be. It would be simply absurd to attempt to raise to an enormous price the labour at Rossa Grande, because simultaneously with it the price would be advanced elsewhere. All he could say was that from the time the present superintendent took office no effort had been spared to retrieve the past. If the works had been pushed on in the early stage of the company, when the accident occurred at the St. John del Rey Mines, this company might have secured all the labour required. As to the future, however, the company possessed a large property, and a valuable one, but it could not be brought into a profitable condition without labour; but he believed if, the war being over, they were still unable to get Brazilian labour, by an arrangement he had set on foot labour could be imported from other parts, so that, irrespective of the Brazilian labour, he believed they would be able to fully man their mines. His opinion as to the future of the company was best shown in the fact that when he joined the board he held 200 shares, whereas he now held over 3000; and his colleagues, or most of them, had increased their interest, and nearly the whole of the shares were purchased at a premium. The only importance he wished to attach to that fact was to show his own personal feeling in the matter, notwithstanding that there had been great difficulty to contend against. At the present time, in spite of all difficulties, they were working almost at a profit at Mina da Serra. Therefore, the moment the other mines were brought into work there could be little doubt the company would yield a profit, and he hoped a very considerable profit. He then moved that the report and balance-sheet be received and adopted.

Mr. L. FOSTER seconded the motion.

The CHAIRMAN, in reply to questions, stated that every improved mechanical appliance was brought under the notice of the manager, and they had plenty of house accommodation for all their labourers. Two vacancies had occurred in the direction, and the manner in which they should be filled up was determined by the Decree of Settlement, with which he had nothing whatever to do.

A SHAREHOLDER suggested that the same plan should be adopted with the Rossa Grande monthly statements as that of the Don Pedro, as to the profit or loss attending each month's operations.—The CHAIRMAN said the reason it had not been done was because it might mislead the shareholders. The Don Pedro and Anglo-Brazilian capital accounts were closed; but as to Rossa Grande, at the present time, although the Mine da Serra was of itself yielding a profit, the total expenses of the company were not covered by it. There could be no objection to the monthly cost being inserted, but during the development of the various lodes it would not be fair to put down the excess of income over expenditure as "loss."

The motion adopting the report and accounts was put and carried unanimously. The retiring directors and auditors were re-elected.

A vote of thanks to the Chairman and directors terminated the proceedings.

#### VANCOUVER COAL, MINING, AND LAND COMPANY.

The annual general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Tuesday,

The Hon. C. W. W. FITZWILLIAM, M.P., in the chair.

The report, which was taken as read, appeared in last week's Journal. The CHAIRMAN congratulated the shareholders upon the present position of the company. As stated in the report, a considerable sum had been deducted from the profits on account of repairs and depreciation of plant, besides which a large sum had been charged against revenue for dead work, so that no fresh liabilities were incurred, and everything had been paid. The Government had selected the freestone from the company's quarry for the building of the Mint, so that for some time, at least, they hoped to derive a steady though not a considerable revenue from that source. There was a slight improvement in the company's property at Nanaimo. Their officers were doing everything they could to promote the prosperity of the enterprise, by their energy, economy, and trustworthiness, and the reports they communicated were ample in details. If they could only get a larger sale for their coal they might, perhaps, reduce the price, and thus command a firm hold on the markets in the Pacific. The directors saw their way to recommend a dividend of 15 per cent. per annum, which would absorb 6595*s.*, leaving a small balance to be carried forward; but by the latest advices they learned that the finances of the company were improving, and as they would not have to expend so much money during the current half-year in dead work they hoped under any circumstances to be able to keep up the dividend at the rate of 15 per cent. per annum. He then moved that the report and accounts be received and adopted.

Mr. GALSWORTHY seconded the proposition.

The CHAIRMAN, in reply to a question, stated that the company received 10*s.* per ton for the freestone.—Mr. J. WILD (a director) stated that the reserves of coal were computed at 150,000 tons, while every level driven proportionately increased the quantity. There was also a seam underlying the present—Douglas seam, from which latter all their coal had hitherto been raised. Instructions had gone out to immediately sink to that seam. Of course, the larger the output the less the cost per ton.

The motion adopting the report and balance-sheet was then put, and carried unanimously.

Upon the proposition of Mr. FRY, seconded by General LE MESSURIER, a dividend was declared at the rate of 15 per cent. per annum.

Upon the question of the re-election of the retiring directors, a discussion arose as to the necessity of maintaining the present number of eight, it being urged that six would be ample to efficiently conduct the company's affairs in London. At length the retiring directors were re-elected, and a resolution was passed that between this and the next meeting the directors should re-lease their number to six. The retiring auditors were re-elected.

A vote of thanks to the Chairman and directors terminated the proceedings.

#### EAST NEW LOVELL MINING COMPANY.

A general meeting of shareholders was held at the Guildhall Coffee House, on Tuesday.—Mr. WATSON in the chair.

Mr. A. E. COOKE (secretary) read notice convening the meeting.

The accounts showed a debit balance of 693*s.* 12*s.* 7*d.*

The report of the manager was read, as follows:—

May 10.—Bawden's Engine-Shaft: Since the last meeting of shareholders the shaft has been sunk perpendicularly to the 16*fms.* plat cut, and have driven south 3*fms.*, to cut the different lodes in that direction, which we hope in the course of another month to meet with. We have had much harder ground, and more water to contend with than could have been expected at this depth; hence our not meeting with the lodes as early as contemplated.—Moss Shaft: We have erected a small engine, and fixed all the necessary work, sunk the shaft to the 15*fms.* level, where we drove a cross-cut south 3*fms.*, and cut the East Wheal Lovell lode, which is being opened on east and west in the western end driving through the East Lovell; lode 5*fms.* wide, carrying a distinctive leader 3*fms.* wide, producing very fine stones of tin; indeed, all the lodes produce tin throughout. In the eastern end the lode is 3*fms.* wide, producing very good stones of tin. I have set this shaft to sink another 10 fathoms by a full force of nine men, and from judgment of the unmistakable evidences at the depth attained, and firmly of opinion that by opening another 10 fathoms deeper a profitable lode will be found to the west of the shaft.

The CHAIRMAN moved that the report be received and entered on the minutes, and that the accounts be passed and allowed.

Mr. BAWDEN, in reply to a question, said that this mine was commenced with the view of proving the New Lovell lodes, but when the run of production of the ground was found in East Lovell, he acquired for the company an extensive of ground which embraced the East Lovell lode.

Mr. EDWARD COOKE would like to ask Mr. Bawden whether he felt perfectly satisfied that it was the East Lovell lode?—Mr. BAWDEN said that he was positive of it; and in addition to that, Captain Quantrell, the manager of East Lovell, had informed him that it was the East Lovell lode.

Mr. BURROWS thought the mine should be explored to greater depth, rather than extending the operations laterally.—Mr. BAWDEN said that they were only 15 fathoms deep, and good tin was showing already. Some mines had to sink 100 fathoms before such stuff was reached. He had arranged for the use of a steam-engine, for which he paid 1*s.* per week, that would take them down at least 30 fms.—Mr. E. COOKE asked if all liabilities were charged up?—Mr. BAWDEN replied in the affirmative, stating that everything was charged up as closely as possible.

The report was ordered to be entered on the minutes, and the accounts were passed and allowed. A call of 5*s.* per share was made.

A vote of thanks was passed to the Chairman, which concluded the proceedings.

#### FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.

The ordinary meeting of shareholders will be held on May 25.

The directors' report states that during the year ending December 31st, 1869, very extensive works have been in progress. A railway has had to be constructed upon the site of the roads connecting the mines with the mills, and is also being extended to new mines of great promise. Two new mills, with 24 heads of stamps, are advancing towards completion. During the progress of these important works great interruptions have been caused to the labourers, and the returns temporarily diminished. The completion of these undertakings, however, will not only effect great economy in the development of the mines, but materially increase the returns. From the fact of consecutive monthly profits having been realised, the comparative capabilities of the mines were in the opinion of the executive, so fully established as to justify the outlay and interruption above alluded to, and accounts for the trifling loss already sustained. A considerable portion of the expenditure has been incurred in extracting mineral, which will be available for reduction upon the completion of the works now in progress. The quantity of mineral stamped during the six months ended Dec. 31 was as follows:—8567 tons; produce in gold dust, 3422 ozs.; average yield per ton, 25*s.* or 7*d.*

#### OLD TREBURGETT SILVER AND LEAD MINE.

The following report from Capt. Hancock shows the progress made in developing this property, and its encouraging future prospects:—

St. Teath, May 10.—Since my last advice the shaftmen have been engaged in driving a side-tail in the adit level from the new engine-shaft round the old shaft, and have got into the level south of the latter on the lode. They are now engaged clearing and securing the level. So far as we can see, the western part of the lode has been all taken away, which was no doubt very productive for silver-lead, the capel part of the lode, being on the eastern side, appears to be standing, and merely cut through, containing in places spots of silver ore, with beautiful quartz, blende, and spots of lead. Seeing the capel part of the lode at this shallow depth producing silver, it looks exceedingly promising for the deeper levels. The capel part from below, by what we can see of the stones we pick up on the old tail-heaps and ledges at surface, is much harder, and contains a greater portion of silver ore. John's shaft is cleared and se-

cured about 7 fms. below the surface. We shall shortly erect a horse-whim on this shaft, so as to get it cleared to the adit, and be in readiness to go below, as the water is being drained out, so as to open up this part of the mine rapidly, where, no doubt, large quantities of capel containing silver will be found, as well as silver-lead. The walls of the engine-house will be up about that required height in about a week more, when no time will be lost in putting on the roof, as well as fixing the engine. We are also taking out the foundation for the balance-bob pit, and making preparations to fix shears, capsans, and other necessary tools, so as to get our pit-work fixed against the engine is set to work. Everything is being pushed on as fast as the nature of the work will admit of, and I feel confident, from what I can see and hear about the mine, that it is only a matter of a little time and capital required to open the mine out, when it will prove a successful adventure.—WILLIAM HANCOCK.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

**NORTH POOL.**—This mine is looking exceedingly well in the 40*fms.</i east and no doubt can be entertained as to permanent*

weaker; at the last meeting a profit of upwards of 4000. was shown on the two months' working; the shares are quoted 5 to 7. ROSEWALL HILL AND RANSOM are firm, at 22s. 6d. to 27s. 6d.; at the ensuing meeting it is expected a profit will be shown. In lead mines WEST CHIVERTON shares have been quoted 57 to 59, but the closing price is 20s. under this; the shares offer an excellent investment. MARKET VALLEY should also be bought, and the same may be said of MARY ANN. The former are 6 to 6½, and the latter 10 to 12. VAN shares, owing to improvements in the mine, have risen to 64, 85; these shares now command a market value of over 1,000,000.; at present, however, the mine is only paying about 3 per cent. on the market value of the shares. Referring to tin stock, ROCH CONSOLIDATED MINE continues to open up in a most gratifying manner. The middle lode is very rich for tin, and contains, the agent reports, the best work yet seen. In addition to the three lodes opened upon, another one has just been met with further north, and good stones of tin have been found upon its back. There are now at surface tens of thousands of tons of tin-stuff raised by the ancient miners, which Capt. Parkyn states will pay all cost, and leave good profits. Such an opportunity to invest in a thoroughly sound undertaking at a moderate price is seldom offered to the public, and those who take advantage of it cannot, in the writer's opinion, fail to realize a handsome profit.

## FOREIGN MINES.

CHONTALES (Gold and Silver).—The directors have advices from Mr. Bell, dated April 6. The remittance of gold, 478 ozs., from 852 tons of ore; average yield, 11½ dwt. per ton; monthly cost, £3451, which includes a bill for freight, &c., £1460. General appearance of the mines decided improving, and Mr. Bell writes in evidently better spirits as to the future success of the undertaking. They are opening up new ground with very favourable results. The health of the establishment is generally good.

Trinidad and West San Benito : Report for March : The Trinidad level has been driven east, on the course of the lode, 11 varas\*, the lode in the end being small and hard, yielding about 4 dwt. of gold per ton; the lode appears to be opening out a little wider, at present about 2½ ft. in width, much easier for driving, and the same in value. In the back of this level we have stopped 8 varas, the lode being hard and difficult for working. The nail in the south part of the lode continues to be worth from 15 to 20 dwt. of gold per ton, and I have no doubt when we get a little higher the nail part of the lode will open wider, and become easier for working, also more productive. We intend to push on this point with all speed : 50 tons of quartz have been sent to mill, yielding 10 dwt. of gold per ton. The rise at West San Benito is communicated to surface; we have also commenced to drive a new level at the top of the rise, west on the course of the lode, which will be an intermediate level, and sufficient to prove this part of the mine.—WILLIAM EVANS.

San Antonio : Report for March : No. 1 stop, in the back of No. 5 level, west of Piper's shaft, has been stopped 70 varas, lode 3 ft. wide, worth 10 dwt. of gold per ton. No. 2 stop, in the back of the same level, west of Piper's shaft, has been stopped 50 varas, lode 3½ ft. wide, worth 25 dwt. of gold per ton. The above stops are on the south lode, and both in new ground; should they continue in value we shall have no difficulty in making the mines pay. No. 3 stop, in the back of No. 5 level, east of Piper's shaft, has been stopped 53 varas, lode 4 ft. wide, worth 5 dwt. of gold per ton. A stop in the back of the deep adit level has been stopped 52 varas, lode 3 ft. wide, worth 5 dwt. of gold per ton. No. 5 level, west of Piper's shaft, has been driven on the course of the lode 2½ varas, lode 3 ft. wide, and worth 10 dwt. of gold per ton. No. 5 level, east of Piper's shaft, has been driven on the course of the lode 6 varas, lode 4 ft. wide, worth 4 dwt. of gold per ton. The deep cross-cut has been driven 7 varas, and will prove the lodes to a greater depth than any level hitherto driven, and in future the main point for working all the lodes. We have sent to the stamp during the month 892 tons of quartz, which I estimate at 11½ dwt., making in all about 460 ozs. of melted gold.—P.S. I find the natives leaving for their homes, in order to spend the holy week; we shall, therefore, have difficulty in keeping the stamps at work throughout the month. No. 2 stop has improved 30 per cent. during the last two days; should it continue a good remittance may be looked for in April.—JOHN TONKIN.

CAPULA (Silver).—The directors have despatches from the superintendent, dated Pachuca, April 7, of which the following is an abstract :—Torta No. 6, of 128½ cargas, is not yet washed. The administrator promised the silver in time for yesterday's conducta, but the torta was not reduced; he now promises the silver from Nos. 6 and 7 for the next conducta. We had in Jesus hacienda up to the 2d instant 502 cargas—in beneficio 278½ cargas, grinding 223½ cargas. This we expect to send over 70 cargas, so as to get two more tortas of 15 montones each, which I trust will be reduced next month.—The Mine : The barreteros worked in six of the stopes last work, which are still looking well, especially three to the east of La Bomba shaft. The engine is still idle, and will remain so until we send the silver to Mexico. We can now raise much more metal, but cannot get it reduced; the want of a hacienda has been the greatest drawback for years, and until we get one for the company we shall always be in difficulties, even if the mine were in bonanza. On account of the very disturbed state of the country, especially in this district, we have to be very careful in bringing the silver from El Chico; we have to bring it by night, without asking for the guia from the custom-house. I trust the Government will take stronger measures to put down the revolution; in the last few weeks, however, the pronunciados have been routed in several places. Last week we had a large party again at Capula; they demanded money, arms, and fodder for their animals; we got off by paying 25¢ and some barley; there are still a few lying about the place. Two of the enginemen have promised to return as soon as affairs look a little more peaceful. We can get the water out in a week, and in a fortnight afterwards intersect the lode in San Pablo cross-cut.

5. Queen-street Place, London, E.C., May 13.—The following telegram has come to hand this morning per Atlantic cable : Its authenticity cannot be guaranteed. H. SWAFFIELD, Secretary :—From Paul, New Orleans, May 12 : To Capula Mining Company, 86, Cannon-street, London : We have struck lode of almost pure ore in bottom of San Pablo cross-cut—quantity appears inexhaustible."

[For remainder of Foreign Mines, see to-day's Supplement.]

WATSON BROTHERS,  
MINING AGENTS, STOCK AND SHARE DEALERS, &c.  
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

SATURDAY.—Market active for Tankerville, Van Consols, East Lovell, New Lovell, Agar, and West Chiverton. Australian United not quite so firm. Tankerville, 17 to 17½; Van Consols, 4½ to 4½; East Lovell, 26½ to 27½; New Lovell, 2½ to 2½; Agar, 2½ to 2½; West Chiverton, 57 to 59; Prince of Wales, 17 to 19; Pennalls, 5½ to 6; Drake Walls, 29½ to 31½; East Bassett, 9 to 10; East Grenville, 2 to 2½; Grenville, 37½ to 42½; Great Redlack, 22½ to 27½; Drake, 6½ to 7½; West Maria, 2½ to 2½; Van, 81 to 82; Australian United, 3½ to 3½; Pacific, 7½ to 8; Don Peiro, 3½ to 3½; Chontales, 17½ to 22½; Taguari, 18½ to 20½.

MONDAY.—Market moderately active. Tankerville and East Lovell rose 10s. each. Van Consols and West Maria firm at quotations. Pacific receded to 7½, sellers. Tankerville, 18 to 19; East Lovell, 27 to 28; Van Consols, 4½ to 4½; West Maria, 2½ to 2½; Tincroft, 32 to 34; Chiverton, 15½ to 17½; Penhall, 5½ to 6; South Conduorron, 2½ to 3; Van, 81 to 83; Prince of Wales, 17½ to 19½; Marke Valley, 6 to 6½; Great Vor, 11½ to 12½; Great Laxey, 18 to 18½; Great Redlack, 20½ to 22½; New Lovell, 2½ to 2½; Chiverton Valley, 4½ to 5½; Mary Ann, 10 to 12; Kitti (St. Agnes), 7 to 7½; Pacific, 6½ to 7; Australian United, 3½ to 3½; Don Pedro, 3½ to 3½.

TUESDAY.—Market dull. Tankerville and East Lovell 10s. each lower. West Maria leave off ½ better. Tankerville, 17 to 17½; East Lovell, 26½ to 27; Van, 82 to 84; Van Consols, 4½ to 4½; Prince of Wales, 17½ to 19½; West Chiverton, 27 to 29; Drake Walls, 28½ to 30½; West Maria, 2½ to 2½; Great Vor, 11½ to 12½; Great Laxey, 18 to 18½; Marke Valley, 6 to 6½; Assheton, 7½ to 8; Cook's Kitchen, 14 to 15; East Bassett, 9 to 10; Pacific, 6½ to 7; Australian United, 3½ to 3½; Don Pedro, 3½ to 3½.

WEDNESDAY.—Market rather quiet, still there is a fair demand for Van, Van Consols, Tankerville, East Lovell, Drake Walls, and Australian United. West Chiverton firmer. Chontales, 15½ to 16½; West Maria, 2½ to 2½; Van, 83 to 85; Van Consols, 4½ to 4½; East Lovell, 27 to 28; Pacific, 6½ to 7½; Tincroft, 33 to 35; West Chiverton, 56 to 58; Providence, 30 to 40; Agar, 2½ to 3½; South Conduorron, 3 to 3½; Drake Consols, 3½ to 4; Bronroyd, 3½ to 4; Chiverton Moor, 4½ to 5½; West Maria, 2½ to 3½; Tincroft, 32 to 34; Providence, 30 to 40; Pacific, 6½ to 7.

THURSDAY.—Market active. Chontales advanced to 30s., buyers. West Maria, Van, Van Consols, East Lovell, Pacific, and Tincroft also in demand. West Chiverton firmer. Chontales, 15½ to 16½; West Maria, 2½ to 2½; Van, 83 to 85; Van Consols, 4½ to 4½; East Lovell, 27 to 28; Pacific, 6½ to 7½; Tincroft, 33 to 35; West Chiverton, 56 to 58; Providence, 30 to 40; Agar, 2½ to 3½; Tankerville, 17½ to 18½; East Cardon, 4½ to 5½; Bronroyd, 3½ to 4½; Chiverton Moor, 4½ to 5½; West Maria, 2½ to 3½; Tincroft, 32 to 34; Providence, 30 to 40; Pacific, 6½ to 7.

FRIDAY.—Market quiet—dealers engaged with settlement. Van, 83 to 85; Van Consols, 4½ to 4½; West Chiverton, 66 to 68; East Lovell, 27 to 27½; Tankerville, 17½ to 18½; Pacific, 7 to 7½; Australian United, 3½ to 3½; Chontales, 1½ to 2; West Maria, 2½ to 3; Chiverton Moor, 4½ to 5½; Crebor, 10 to 15; Tincroft, 33 to 35; Prince of Wales, 17½ to 19½; Rosewall Hill, 1½ to 2½.

The allotment letters of the new shares offered to the shareholders under the resolutions passed at the recent general meeting by the Cape Copper Mining Company (Limited) are being posted to-night (May 14). Applications have been received from the holders of the old shares considerably in excess of the number offered.

A petition for winding-up the Bron Heulog Lead Mining Company (Limited) is to be heard before the Master of the Rolls on June 4.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending May 8 was 10,550. ss. 2d.

THE NEW VADE MECUM (invented and manufactured by Charles H. Vincent, optician, of 23, Windsor-street, Liverpool) consists of a telescope specially adapted for tourists, &c., to which is added an excellent microscope of great power and first-class definition, quite equal to others sold at ten times the price. Wonderful as it may seem, the price of this ingenious combination is only 3s. 6d. and Mr. Vincent sends it (carriage free) anywhere, with printed directions, upon receipt of Post Office order, or stamp, to the amount of 3s. 10d.

CURES OF ASTHMA, COUGHS, AND DISEASES OF THE CHEST, BY DR. LOCOCK'S WAFERS.—From G. M. Tweddell, F.R.S.N.A. and F.S.A.S., author of "Shakespeare's His Times," &c., Stokesley, York :—"I have always found them to give immediate relief to myself, my wife, and children, in difficulty of breathing, coughs, and affections of the lungs, and witnessed their good effects on friends who were asthmatical." Price is 1½d. per box. Sold by all druggists.

HOLLOWAY'S PILLS AND OINTMENT.—The friends of the afflicted should try in their trouble these purifying remedies. For more than the third century have these medicaments been before the public, by which their merits have been universally recognised and commended. In all ailments they prove useful. In debilitated constitutions they act as preventives to disease, and when maladies have manifested themselves the afflicted can resort to no remedy at once so efficient and harmless as Holloway's. They keep the blood pure, and preserve the stomach in a sound state; they cool and cleanse the old system. These medicaments should be possessed by all; they will confirm good health, and prove serviceable under any infirmity which can afflict mankind.

# The Piel Hematite Iron Company

(LIMITED).

To be incorporated under the Limited Liability Act.

CAPITAL £100,000. IN 1000 SHARES OF £100 EACH

(With power to increase to £150,000 if necessary.)

A deposit of £10 per share to be paid on allotment. Subsequent calls at intervals of not less than two months, to the extent of seven-tenths of the entire capital—the remaining portion to form a reserve.

DIRECTORS.

The Chevalier HARRY CLENCH, K.G.S., K.S.L., K.G.C., &amp;c., &amp;c., Norwich.

Lieut.-Col. H. RIGG, Cross Rigg Hall, Penrith.

FRANCIS PARKER, Esq., Acorn Bank, Penrith.

JOHN BEATSON, Esq., Iron Merchant, Sheffield.

E. TALBOT, Esq.—MANAGING DIRECTOR.

BANKERS—THE LANCASTER BANKING COMPANY.

SOLICITORS—LAWRENCE HOLDEN, Esq., Lancaster.

Messrs. HANCOCK, SAUNDERS, AND HAWKSFORD, 36, Carey-street, Lincoln's Inn, London.

AUDITOR—H. C. BELOE, Esq., Liverpool.

SHAREBROKERS.

Messrs. H. BAZETT JONES AND SONS, Preston.

Messrs. RIDSDALE AND WALES, Albion-street, Leeds.

Messrs. WOLFENDEN AND GELL, Corporation-street, Manchester.

JARVIS W. BARBER, Esq., 40, Queen-street, Sheffield.

SECRETARY AND ACCOUNTANT—MARDON THOMAS, Esq.

The object in establishing this company is for the purpose of erecting furnaces and smelting the richer ores of Ireland in combination with the hematite ores of the Furness district. The annual produce of the latter cannot be less than 900,000 tons per annum, a large portion of which is sent out of the district, instead of being consumed therein, which can now be done with advantage and profit.

A site for the works has been selected in the vicinity of Piel (adjacent to the iron ore pits), and near to the large establishment of the Barrow Hematite Steel Company, which offers every facility for the successful development of the enterprise. The close proximity of the shipping port and extensive docks of Barrow, together with the harbour of Piel, will enable pig-iron to be dispatched, and the Irish ores to be received, with advantage to the concern.

Provision will be made in the Articles of Association by which mining property in the district, and other suitable localities, may be worked by the company. Leases of hematite property, embracing some hundreds of acres, in the Furness and other districts, are now under consideration, with a view to their being transferred to this company on advantageous terms.

A considerable portion of the capital has already been subscribed, and arrangements have been made with a gentleman (who will act as managing director), possessing long and valuable experience, by which every security will be afforded that the capital will be carefully and judiciously expended, and the subsequent working operations be conducted with caution and economy.

The company will be duly incorporated under the Limited Liability Act, by which every shareholder is responsible only for the amount of his shares.

It is proposed to place the capital at £100,000, in shares of £100 each; to call up (say) £70,000 (in periodical payments, as may be required), and allow the remainder to form a reserve capital.

The cost of erection of three modern-built furnaces, with all requisite appendages, purchase of land, &amp;c., will be £50,000, thus leaving of the called-up capital £20,000 as a working fund.

The cost of making iron will be about £2 12s. 6d. per ton, and the selling price

is now £3 per ton at existing works; so that upon a weekly output of (say) 1200 tons on the average (that is, after allowing for the variations of the Iron Market), from three furnaces, good profits will accrue to the proprietors, equivalent to a return, on the average, of 15 per cent. per annum.

The Furness Railway Company, whose main line passes the intended site, have kindly intimated their wish to render all possible assistance to the projected company.

The market for hematite pig-iron is now on the advance, and as it is the only class of iron employed in the Bessemer system, it is fully evident that a constant demand must exist, and continue to increase, for there can be no doubt, now that the Bessemer royalty has terminated, a great impetus will be given to this special branch of manufacture; its future requirements, therefore, will be very considerable, and as the production of hematite pig-iron must necessarily be restricted, it will be seen that a good and permanent prospect of success awaits this important section of the iron trade.

Applications for shares will also be received by the solicitors of the company, LAWRENCE HOLDEN, Esq., Lancaster; and Messrs. HANCOCK, SAUNDERS, and HAWKSFORD, 36, Carey-street, Lincoln's Inn, London, from whom prospectuses can be obtained.

## FORM OF APPLICATION FOR SHARES.

To the directors of the Piel Hematite Iron Company (Limited).

GENTLEMEN,—I request that you will allot me shares in the above company, and on receipt of notice of such allotment, I will pay to the bankers of the company £10 per share as deposit; and I undertake to pay any future calls as they may become due. I further request that you will place my name on the Register of Members for the shares so allotted.

I am, Gentlemen,

Name.....

Residence.....

Occupation.....

# The New Rosario Silver Mining Co.

(LIMITED).

CAPITAL £50,000, IN 50,000 SHARES OF £1 EACH.

Deposit on application 5s. per share, and no payment on allotment.

No subsequent call to exceed 5s. per share, or at less intervals than four months.

If no allotment be made the deposit will be returned in full.

Deposit for (scrip) share warrants 5s. per share on application; the balance, 15s., on allotment.

DIRECTORS.

ALFRED BRYANT, Esq., Mincing-lane, Merchant.

JAS. DAVIS, Esq. (late of Ulverston), Harley-road, West Brompton.

J. GOODSON, Esq., Kensington-gardens-square.

JOHN MORKILL, Esq., Colliery Proprietor, Leeds.

CHAS. MORRIS, Esq., Chairman of the Fortuna Mining Company, and Director of the Economic Life Association.

JOHN POTTS, Esq., Merchant, City of Mexico.

BANKERS IN LONDON—THE CONSOLIDATED BANK, Threadneedle-street, London, E.C.

SOLICITORS—Messrs. NOKES AND CARLISLE, 8, Finch-lane, E.C.

BROKERS—Messrs. WOODALL AND ALLEN, 1, Cushion-court, Old Broad-street.

SECRETARY—H. W. MAT

## Mining Correspondence.

## BRITISH MINES.

**ABERDAUNANT.**—J. Roberts, May 11: We have resumed driving the No. 2 adit end east of the winze; the lode will produce about  $\frac{1}{2}$  ton of lead per fm.; we have also commenced opening on the branch of lead at the west of the winze, which is worth 1 ton of lead per fathom. We are clearing the "deads" from the 10 fm. level, which came from the winze for the purpose of stopping the bottom. The new shaft is down about 5 fathoms; I should advise the continuance of this to the No. 2 adit, as it would prove the lode, and ventilate that level; and as it will meet with the junction of branches before it is down to that point, I should think it may open up profitable working ground. In the eastern deep adit we have not yet arrived at any solid ground; the flockan is of precisely the same character as in places where this lode has made very large returns of lead.

**ASHTON.**—W. T. Harris: Lindow's engine-shaft is 16 fms. from surface, and satisfactory progress is being made. The lode in the deep adit level south is worth 10 cwt. of lead per fathom, and very promising. In the cross-cut through the lode there is no change to note. Gundry's shaft is 3 yards deep; ground favourable for progress. All surface operations are carried on regularly; the engine is being set, and other work in a forward state.

**BLAEN CAELAN.**—John Evans, May 11: The lode in the 25, east from adit, is still bearing to the north; it is of the same character as you saw it when underground last week, and is producing on the south side of the driving good stones of fine-quality lead ore, incased in a beautiful sugary spar. This level is being driven so as to keep with the north wall of the lode, irrespective of its bearing, on which we have a flockan, or soft, for about 2 ft. wide. This, of course, is opened very much cheaper, and the men are enabled to make rapid progress; and as we have already a large pile of rich ore-stuff at surface, which cannot be dressed until the machinery from the Perran Foundry is erected, I agree with you that it would be useless to divert the line of driving, at more cost, for the sake of getting ore under these circumstances. We are rapidly opening a very fine mine. The level east is now extended 43 fms. from adit, and we have thoroughly proved the lode by a cross-cut south, about 18 fathoms from the western end of this level, which has so proved it to be 5 fms. wide, carrying good ore right up to the south wall, worth 2 tons of lead ore per cubic fathom. All this ground, so left on the south of this level, will be stopped away very cheaply after we are ready to surface to treat and make the ore marketable. We are also opening a cross-cut north of this level, to intersect the north lode, which, I think, will be accomplished by the end of the month. All the strength of the mine has this week been employed in lowering the engine and boiler from surface down the shaft; the boiler was obliged to be sent from the Aberystwyth Foundry in halves, and Messrs. Durie and Davis' men are now riveting the boiler-pates underground, while the masons are getting foundations ready. We expect to get this engine to work in about a fortnight, when we shall immediately get the water out from the 10 below adit, which level is opened east about 18 fms.; and from the end we shall put out a cross-cut south, and thus prove the lode again at this increased depth. The south lode is not yet reached by the main or straight adit; the ground is favourable for driving, and let us go on more water. Of course, the bend in the lode, shown in the 29 east, would give us further to drive at this point, which is 60 fms. east of the end of level.

**BLUE HILLS.**—S. Bennetts, John Andrews, May 7: Since the last quarterly meeting the principal operations in the mine have been as follows:—The 66, north of Letcher's shaft, has been extended 5 fathoms, making, with the 14 fms. found to be driven by the former workers, 19 fathoms; a very short distance further will, no doubt, intersect the lode. The 63, east of Letcher's, has been driven 3½ fathoms, where the lode is large, producing low quality tin-stuff, and occasionally good stones of tin. In the 60, north of the great gossan, and nearly opposite Letcher's shaft, the top part of the lode beyond the head is found about 1½ feet wide, thin throughout, and now worth 8t. per fathom; this we consider a very important point, as it is just opposite the tin ground found valuable on the other side of the gossan, and as the rich bunch did not hold good quite down on the gossan, we think the lode here will soon improve as it again leaves it—the underlie is very fast, and hence the reason it is not yet found in the 66 north. The 50 east has been further extended 3 fathoms on a large lode, producing some good work. The 13 east, on the Betay lode, has been driven 6 to 7 fathoms, the first 4 fathoms being worth 7t. per fathom, the latter portion unproductive; at present the lode seems again improving, and is yielding some good stones of tin. Claridge's shaft has been sunk a further depth of 7 fathoms, and is now 9½ fathoms below the adit; the lode has occasionally produced good stones of tin, but is irregular, both as to size and quality. In the bottom of the shaft the lode is 1½ ft. wide, and again containing some good stones of tin, and as yet without a trace of water; this is important, and considering the very fast underlie of the main lode, this shaft is one of the most important points in the mine to push on with vigour. It is probable several upheavals of the lode will be found between the northern workings on that lode and Claridge's shaft, and the main lode be found to intersect Claridge's not far below the present bottom. During the quarter over 5 tons of tin have been raised. All the machinery and plant is fixed, and in first-class condition, which will enable the mine to be fully developed in an economical manner, especially so as the water in the mine is very little. We estimate the loss during the coming quarter will not much exceed 400t., and a very small discovery will prevent any loss. We suggest the propriety of pushing on the sinking of Claridge's shaft, sinking a winze through to the 66 to open out the lode north of the gossan, below the 60, and to continue the 66 cross-cut north of Letcher's, as the most important points to be attended to. Looking at the character of the lode just opening out north of the gossan in the 60, and considering the large quantities of tin found on the other side of it, our confidence continues strong in the ultimate success of the undertaking.

**BRONFLOYD UNITED.**—T. Kemp, May 10: Just up from underground, and I am pleased to tell you that the lode in the 56 west continues to improve, and is now producing fully 1 ton of ore per fathom. There is also every appearance that we shall have a first-rate lode here presently. **BRYNPOSTIG.**—John Kitto, May 12: We have completed the cutting of the lode at the 45 fm. level, put in plat solar, and are quite ready to resume the sinking of the engine-shaft below. Since finishing the lode we have driven the 45 west of same, on course of lode about 10 feet, through a lode 4 feet wide, but poor. I may remark, however, that whatever ore is found in this direction will be new and in whole ground, as our other bunches are in this level all to the east of the shaft. We have driven the same (48) level east of shaft 6 fathoms, through a lode averaging 3½ ft. wide, and yielding saving work for lead and blonde, but this we expect will daily improve, as we know our best ore ground is yet before us. The two stopes, referred to my last, above the 36 fm. level east have since been let at 40t. per fathom; here we have some good ore, as this is a new bunch much more reliance can be placed upon its holding down below this level than above. In the cross-cut in the 24 fathoms level, driving towards the south part of the lode, we have a change of ground, and a large increase of water, and I think we are close upon the vein. I hope to be able to report a good discovery here in a very few days.

**CAEGYNNON.**—May 12: In the 36 fathoms level, east of shaft, the lode is improving, producing blonde and stones of lead ore; set to four men, at 120t. per fathom. The stope below the 30 fm. level, west of No. 2 winze, will yield 12 cwt. of lead ore per fathom. The stratum is the same at each of these points as described in our last report. We have completed the junction shaft on the north lode 20 fathoms below the deep adit, and are now engaged in executing the preliminary work, such as excavating ground for plat-solar, placing the necessary sleepers and sliding boards from the 10 to the 20, preparatory to driving east and west on course of the lode at this depth, and sinking the shaft below this level. The yield of lead west, in the 10, on north lode, is not to value. The 10 east, on north lode, is yielding occasional stones of rich lead. The counter-lode south-east, in the 10, towards the great south lode, is worth for lead and copper 5 cwt. per fathom. The winze east of junction shaft, below the deep adit, on the north lode, is worth for copper fully 2 tons, or 33t. per fathom. The winze west of this shaft, below this level, is worth for lead and copper 1½ ton per fathom. We beg to report that we have been induced by indications in the deep adit west, on the north lode, to cross-cut from the original course of driving north to ascertain whether something of importance was not to be found, and we have, therefore, pleasure in apprising you of a great discovery of ore. The lode at this point is about 13 feet wide, producing for that width about 6 tons of blue lead. From present appearances, the point alluded to is not unlike a junction of lodes, but sufficient has not been done to determine the question. This shall have our attention in the report we send.

**CAPE CORNWALL.**—Richard Pryor, J. Davey, May 9: Saturday last being pay day and setting, the following bargains were set:—The 100 fm. level cross-cut to drive north of the engine-shaft, by six men, at 14t. per fathom; the ground is composed of manganese, spar, and spots of copper ore intermixed. The 70 fathoms level cross-cut to drive south of shaft, by four men, at 9t. per fathom; this end is composed principally of spar, and letting out a quantity of water, and judging from present appearances here as well as in the 100, we may daily expect to intersect the lode at each point.

**CAPPAH.**—H. Thomas, G. Ellis, May 10: The engine is working in first-rate order, and the water in fork to the 24 fm. level. The 14 fm. level and the 24 fm. level are now dry, and if no unforeseen accident occur no doubt the mine will be dry in another fortnight. In the 94 fm. level it is more than probable that some good ore bargains will be let as soon as the 61 fm. level is reached. We are now engaged in repairing the boiler-house roof, and overhauling and cleaning the whim-engine; in fact, we are getting on with the necessary work as fast as we possibly can.

**CARADON CONSOLS.**—S. Bennetts, May 10: Clym's lode, in the 90 fathoms level west, continues to yield about 1 ton of ore per fathom, and of a very promising character. In the same level east it is 2 ft. wide, saving work. In the shaft below the 90 there is no change to notice. No. 2 lode, in the 78 west, is much the same as last reported. In the east end it continues to yield saving work, some 2 ft. wide, and in the winze below 1 ft. wide—good dredgy work.

**CARDIGAN BAY CONSOLS.**—C. Williams, May 13: Penson: The engine-shaft is now down 13 fms. 3 ft. from surface, or 8 fms. 3 ft. under the adit level, leaving 1 fm. 3 ft. more to sink to reach a 10 fm. level, which will be completed early this month, after which we shall strike out levels east and west on the course of the lode, wherefrom you may fairly anticipate some very favourable results.—Eastern Adit: The bearing part of the lode in this level is from 12 to

14 in. wide, composed of crystallised spar, gossan, carbonate of lime, mudi, and carrying a rib of lead ore from 1 to 2 in. thick, of nearly pure metal.—North Adit: The ground in this adit is composed of slate spar, highly charged with mudi, and very congenial for lead ore.—Bynarlawn Old Adit: During the past week we have broken through several branches of spar, blonde, and small strings of lead ore; and, from the general appearance of the ground, I have no doubt we are approaching a good lode in this level.—Boundary Shaft: The lode at this shaft is 3 ft. wide, consisting of clay-slate, quartz, gossan, blonde, and branches of lead ore throughout—a very promising looking lode indeed. I am now erecting a horse-whim at this shaft, for the purpose of drawing the ore stuff from the workings below to the crusher, so that no time should be lost in making it ready for market. The carpenters will begin putting up the water-wheel for the crusher on Monday next. The machinery at Pensarn is working satisfactorily.

**CHIVERTON.**—G. E. Tremayne, John Borlae, May 12: The engine-shaft is 9 fms. below the 40 fm. level, in a beautiful lode, presenting a better appearance than it has for the last 15 fms. sinking. It is composed of soft spar, flockan, and mudi, with spots of lead. In the 40 east, on the east and west lode, the lode 2½ ft. wide, composed of spar, flockan, and mudi, and producing saving work for lead; we expect this end will improve as it gets out of the influence of the north and south lodes. In the 30 east the lode is 2 ft. wide, composed of spar, flockan, and mudi, with spots of lead occasionally. The 30 west is held to the north and south lode. The stopes continue to yield their usual quantity of lead. We have sunk a trial pit about 90 fms. east of the new shaft, down 5 fms., and cut the east and west lode, which is 2 ft. wide, composed of flockan, mudi, blonde, and producing saving work for lead. We are pleased to say that for the depth we never saw a kindlier and more promising lode, which is embedded in a most beautiful channel of ground, and has everything about it to warrant a speedy success.

**CHIVERTON MOOR.**—G. E. Tremayne, W. Bennetts, May 7: The 105 cross-cut, to drive south of Harris's engine-shaft, by six men, for the month, at 6t. per fathom. The 95, to drive west of Harris's shaft, by six men, at 3t. per fm. for the month; the lode is 5 ft. wide, composed of flockan, quartz, mudi, and stones of lead—a very promising lode. The 85, to drive west of cross-cut, by six men, for the month, at 3t. 10s. per fathom; the lode is 3 ft. wide, and worth 20 cwt. of lead per fathom. No. 1 stope, in the back of the 85, by six men, for the month, at 2t. 10s. per fathom; the lode is 12 cwt. of lead per fm. No. 2 stope, in the back of the 85, by six men, for the month, at 2t. 10s. per fathom; the lode is 20 cwt. of lead per fathom. No. 3 stope, in the back of the 85 by four men, for the month, at 2t. per fathom; the lode is worth 20 cwt. of lead per fathom. No. 4 stope, in the back of the 75, by four men, for the month, at 2t. per fathom; the lode is worth 5 cwt. of lead per fathom. No. 5 stope, in the back of the 75, by six men, for the month, at 2t. per fathom; the lode is worth 10 cwt. of lead per fathom. No. 6 stope, in the back of the 75, by six men, for the month, at 2t. 15s. per fathom; the lode is worth 25 cwt. of lead per fathom. No. 7 stope, in the back of the 75, by four men, for the month, at 2t. per fathom; the lode is worth 20 cwt. of lead per fathom. A rise in the back of the 65 by four men, for the month, at 2t. per fathom; the lode is worth 5 cwt. of lead per fathom. A cross-cut to drive at the 55, north of Ward's shaft, by three men and three boys, for the month, at 3t. per fathom. Our pay and setting passed off very satisfactorily.

**CRENNY AND WHEAL ABRAHAM UNITED.**—W. Kitto, W. Thomas, W. J. Pauli, May 10: Wilson's Engine-Shaft: The sumpmen have been engaged driving and easing the shaft from the 110 to the 140 fm. level, and fixing ladder-road, &c., which is complete to this point for drawing purposes. The sumpmen are to-day dropping down a 12-ft. pump, which will make 3 fathoms below the 160. We shall at once begin to clear the level, and to cut hitches for bearers, in order to drop the lift to the 170 fm. level; and if the shaft is clear of stuff we hope to drain the water to this point by the end of the month.—Middle Engine-Shaft: The water is drained to the bottom of the 160 fm. level, and we set yesterday for the sumpmen to cut ground and hitches for easter and bearers, to fix the lift in the same, and to cut hitches to put in drop bearers for drop-lift, to send down a piece of main rod, and fix a plunger-lift in the adit for house water, as per bargain (20t.), which we expect will be completed by the end of the month; and if the shaft is clear of stuff we shall soon after see the 170 fathom level. The men are making fair progress in driving the cross-cuts north and south, and we are pushing on the other operations as fast as possible: they are too numerous to particularise.

**CUDDRA.**—T. Puckey, May 10: In the 150 cross-cut, north from Walker's shaft, we have driven through the main part of the lode, which is about 18 feet wide; in consequence of the lode being very hard and unproductive for tin in this level, we have suspended further driving for the time, and have commenced to drive the 130 east of the same shaft, on the tin part of the lode, which is 6 ft. wide, and yielding exceedingly promising, being composed of quartz, peach, and iron, and yielding saving work for tin, worth from sample assayed 8t. per fm. in the 117 east of the shaft, we are about to cut into lode; we have cut through the south capels, and have reached the tin part of the lode, but there is not sufficient done to prove its value. The driving of the 105 end east is still being continued by the side of the lode, through ground that is very congenial for mineral, and is good for progress. In the 142 end, driving west of Walker's shaft, no lode has been taken down for the month. The lode in the stopes the different levels are still very large, and without any alteration in value since last reported.

**CWM ERFIN.**—May 10: The lode in the 45, east of the boundary, is 2 feet wide, composed of a light clay-slate, quartz, and spots of blonde. The stope in back of this level will produce 10 cwt. of lead ore per fathom. The stope in back of the 15 is worth 1 ton per fathom. The lode in the intermediate level, over the back of ditto, is worth 1½ ton of lead ore per fathom. The lode in the stope in back of ditto is worth 15 cwt. of ore per fathom. The stope in back of ditto, 25 fms. west of engine shaft, is worth 1½ ton of lead ore per fathom. The lode in the rise against Taylor's shaft is 5 ft. wide, grey throughout, and yielding dressing work. The lode in the 32 is 2 ft. wide, and worth 1½ ton of lead ore per fathom. Taylor's shaft, sinking below the 20, is yielding some good stones of lead ore. In the rise in back of the deep adit the lode is 2 feet wide—poor. The lode in Taylor's drift is unproductive. The lode in the rise in back of ditto is ½ yard wide, yielding occasionally stones of lead ore. The stope in back of ditto is worth 2 tons of lead ore per fathom; this stope will be exhausted in two months. Nothing has been met with in our cross-cuts.

**CWMROG.**—T. B. Davies, May 6: We have been able to see the leader of lead in No. 2 stope, the width is from 5 to 7 in., solid lead; as I myself have seen it, therefore I can testify to the truth. The men who knew of the place previously told me it is much wider at the forepart of the adit, which we have not yet seen. As the three adits are now clear, as ordered, how do you wish me to proceed? The No. 1 adit is improving very much, the lead in sight is worth several pounds of pounds. We have discovered already sufficient room to work on lead for years.

**T. B. Davies, May 9:** We are getting on well at the mine. The No. 2 adit is improving every day. We have discovered three leaders of lead, running parallel in it, of 6, 4, and 2 inches; solid, total, 12 inches. The burrows turn out well. No. 1 adit is improving daily. I am sure you will be surprised to see the prospect in the different adits.

**DEEP LEVEL.**—May 12: There is no change to notice in any part of the mine since our last report. The cross-cut from the bottom of Trustee's shaft going south, is a favourable ground for driving, where we are making good progress. We sampled 8 tons of ore on Tuesday, for sale at Holywell-day.

**DUKE OF EDINBURGH.**—C. F. Collom, May 12: There is an important change in the rise in the back of the 40 (from which level it is now up 8½ fms.)—another part of the south lode is come in, forming with the lode we have been driving in this; with the squat of black and yellow ore we have been meeting with lately, some of which making regular branches 3 to 4 in. wide, augurs well to meet with a good deposit of ore between this and the gossan. There is no change in any other part of the mine.

**EAST CARN BREA.**—John Rodda, May 11: We are taking down the lode in Thomas's engine-shaft, which is not looking quite so well for tin, but improved for copper, and worth for tin and copper 20t. per fathom. The lode in the 100 east, on the 10 fm. level, west of No. 2 winze, will yield 12 cwt. of lead ore per fathom. The stratum is the same at each of these points as described in our last report. We have completed the junction shaft on the north lode 20 fathoms below the deep adit, and are now engaged in executing the preliminary work, such as excavating ground for plat-solar, placing the necessary sleepers and sliding boards from the 10 to the 20, preparatory to driving east and west on course of the lode at this depth, and sinking the shaft below this level. The yield of lead west, in the 10, on north lode, is not to value. The 10 east, on north lode, is yielding occasional stones of rich lead. The counter-lode south-east, in the 10, towards the great south lode, is worth for lead and copper 5 cwt. per fathom. The winze east of junction shaft, below the deep adit, on the north lode, is worth for copper fully 2 tons, or 33t. per fathom. The winze west of this shaft, below this level, is worth for lead and copper 1½ ton per fathom. We beg to report that we have been induced by indications in the deep adit west, on the north lode, to cross-cut from the original course of driving north to ascertain whether something of importance was not to be found, and we have, therefore, pleasure in apprising you of a great discovery of ore. The lode at this point is about 13 feet wide, producing for that width about 6 tons of blue lead. From present appearances, the point alluded to is not unlike a junction of lodes, but sufficient has not been done to determine the question. This shall have our attention in the report we send.

**EAST DARREN.**—May 10: Taylor's shaft: In the 116 east the lode is 1½ yard wide, composed of a dark clay-slate, beds of grit, carbonate of lime, and yielding small spots of ore at times, and judging from the ore ground passed through the level above we have some distance to extend this level in order to reach the same. In the 104 east the men are still employed in stripping down the south part of the lode, which is from 8 to 9 ft. wide, and will yield for its whole width 1½ ton of lead ore per fathom. In the stopes west of ditto the lode is 1½ yard wide, producing 1½ ton of ore per fathom. In the 92 east the lode is 4 ft. wide, producing small branches of ore, but not a sufficient quantity to value. In the 68 east the lode is 1 yard wide, composed of a clay-slate, strings of carbonate of lime, and unproductive. In the 68, west of Skinner's shaft, the men are pushing on the end as fast as possible. In the cross-cut, north of new shaft, not any strings or branches of the lode have been met with, and the underlie of the lode from surface to this depth can be but little, as the cross-cut is now in 10 fathoms, but hope to reach the lode shortly. In the eastern cross-cuts north we have no change in the ground to notice. The tribute pitches (six in number) are looking much the same as last reported.

**EAST POOL.**—W. S. Garby, J. Maynard, J. Hesketh, May 9: Great Lode: The cross-cut in the 180 fm. level is driven in the lode 8 ft., which so far is free from wolfram; it is composed chiefly of peach and quartz, and is worth for tin 18t. per fathom. We have now set to drive east and west of the cross-cut, and hope to drain the ground and to be enabled to sink a winze from the 170 immediately. The 170 is driven east of the cross-cut 42 fms., and is worth for tin 15t. per fathom. Four stopes are working in the back of this level—two east of the cross-cut, worth 20t. per fathom, and two west, worth 12t. per fathom. The 150 cross-cut, on the cross-course, is driven 8 fms. south of the lode; the lode is 12 ft. wide, composed of a dark clay-slate, beds of grit, carbonate of lime, and yielding small spots of ore at times, and judging from the ore ground passed through the level above we have some distance to extend this level in order to reach the same. The 140 east, on the 14 fm. level, west of the 130, is 2 ft. wide, and yielding saving work for lead. The 130 is driven east of the 13 fm. level, which is of great service for the ventilation of the mine, and there is a footway fixed in it complete. The 14 fm. level is driven from the engine-shaft 25 fms. westward; the lode is split 7 fms. west of the shaft, and has not united since, but the north part of the lode underlies faster than the south part, and turns southward in the end, so that the two parts are likely to unite, both below the level and in driving, and in thus unit

week or two, and put the men to sink a winze in the bottom of this level; since we commenced to sink the lode is much improved, and is now worth 6 tons of ore per fathom, or 21*t*. The lode in the winze in the bottom of the 35 fm. level, west of footway shaft, the lode is worth about 2 tons of low-price ore per fathom. Tom's stope, in the back of the 35 fm. level, west of footway shaft, is worth about 10*t*. per fathom. Skinner's stope, in the back of the midway level, on No. 2 lode, is worth 3 tons of ore, or 10*t*. per fathom. Williams' stope, formerly A'ten's, in the back of the 35 fathoms level, on the new north lode, is 2 ft. wide, worth 10*t*. per fathom. We have put two men to clear out the 45 fathom level, on the south or old Kelly Bray lode, east of old engine-shaft, so as to get it under a good piece of ground gone down a little to the west of the higher whim-shaft. We think the tribute department is a little improved.—Holmibush: The engine and pitwork are working well, and we are happy to inform you that we are in fork in the 45 fm. level, and are now working under this level. We have this day been through the 45 fm. level, and we can now substantiate the statements made in our prospectus as regards the quantity of mudiic. Judging from the appearance of the lode, it will turn out from 8 to 12 tons of mudiic per fathom. Judging from the stalls in this level only, we have 500 tons of first-class mudiic already broken. Warren's stope, in the bottom of the 20 fm. level, at Moor's shaft, is worth 8 tons of good mudiic per fathom. We think, upon the whole, our prospects were never looking better than now.

LLYWEFRONG.—J. Davis, May 12: The men are proceeding satisfactorily with cutting down the first 30 fathoms of the engine-shaft.

LOVELL CONSOLS.—J. Nancarrow, May 11: The shaft is down on the new lode 7*t*. fms.; as yet there is no water, which is evidently drained off by the adit driven from the engine-shaft; this adit is known to be within 30 fathoms of the lode, and may be much nearer, but is full of stuff, and ought to be cleared; the lode is 2*t*. ft. wide; it is not so good as last week, which seems to be owing to its underlying more, but we think this only temporary, and that it will soon be as valuable as ever. Fair progress is being made in sinking the north shafts, and the ground is quite congenial for tin.

MAES-Y-SAFN.—May 9: The 370, east of Grosvenor's shaft, has not changed since last reported; the end yields some fine lumps of lead, and looks promising. The 350 west has improved a little, the lode is getting softer for driving, and yields a little lead. The 310 west is poor. The 370, east of the sump-winze, is producing 3*t*. ton per fathom. The 370 west is unproductive. The 290, east of No. 3 shaft, is producing 1*t*. ton per fathom. The winze under the 310, west of Grosvenor's, is producing 1*t*. ton per fathom. The stopes in bottom of the 310 west are producing 2 tons per fathom. There is no change to notice in any other place throughout the mine. The mine is in fork, and all the machinery is in good working order.

MID-WALES.—John Kitto, May 12: We have completed the changing of the lifts at the engine-shaft, and have resumed the sinking below the 24, which will now proceed without further interruption. The lode in the 12, driving west, was not so good for a few days after my last report, but it has again improved, and is now worth fully 1 ton of lead ore and 1 ton of blend per fathom. The winze sinking below the adit level, and which is now about 5 fms. in advance of the 12, is still yielding good ore, worth at least 25 cwt.s. of lead per fm.; there is at present every appearance of having a long run of productive ground in this part of the mine. There is no change to notice elsewhere since my last.

MINERA UNION.—J. Nicholls, May 12: Low's Shaft: In the 40 yard level there has been nothing done for the past week; the men have been engaged repairing Brabner's shaft. The lode in the winze in the bottom of the 30 yard level, south of Brabner's shaft, is without change since last report.—Fine Shaft: The lode in the 50 yard level north is now worth 12 cwt.s. of lead per fathom, and very promising for a further improvement. All the pitches continue to yield their usual quantity of lead.

NANTES CONSOLS.—Thos. P. Thomas, Joel Williams, May 12: Penrhyn: The 36 fathom level west is still looking well, but not having room to deposit the ore, we are driving on the south side of the ore part, consequently we cannot report its value, but we have no doubt it will be found productive when taken down. We hope next week to have the shaft timbered and ready for drawing from this level. The 26 west is still suspended; but the rails being now in Aberystwyth, we shall get them here, and hope next week to resume the driving. The winze sinking below the 26 is producing about 8 to 10 cwt.s. of lead ore per fathom, but the lode is looking very strong, and likely to improve. The stopes in the back of the 26 and the 16 fm. levels are not looking so well as they were, being very much mixed up with sulphur, and buncy, producing about 1*t*. ton of lead ore per fathom each, with some blonde. Some days they are looking very well, and then the next they are looking very poor, but they are too productive to stop, and will do well to work, but not to rely upon for a regular monthly return.—Bwlch Gwyn: We have purchased at the Tylwyd Mine sale a considerable quantity of dressing machinery, hatches, trunks, buddles, chain, crab-winch, &c., that will go a good way towards making complete our dressing-floors for this set, and we have now timber, so that we shall proceed with all speed to get this mine in work, where, from the number of applications we have had for tribute pitches, we hope soon to have good returns, and as the ore is almost free from sulphur, and very superior to Penrhyn, we anticipate less difficulty in getting regular samplings. We intend sampling another parcel of ore on Saturday.

NEW CENTRAL SNAIL BEACH.—E. Parry, May 12: The 200 yard end driving west is now getting out of the influence of the cross-joints, and has now a lode 3 ft. wide, with a leader of lime, spar, and lead ore, out of which there is a little water issuing; it is producing saving work. I never saw the end look so promising before for lead as it does to-day. The sump sinking below this level is now down 2 fms. We have fixed turn-tree, &c., and shall continue to sink with all possible speed. We are making good progress with Myton Dingle shaft, which is now down 4*t*. fms. We have cleared the mouth of the black hole adit, and let out the water. This level is driven 260 yards.

NEW CROW HILL.—A. Kent, T. Trelease, May 10: At the engine-shaft our men have commenced driving the cross-cut inside of the pit; the ground is pretty stiff for driving through. On the north lode we are pushing on an adit; its course the back of the lode is just coming up in the bottom of the end. We think we shall be able to report its size and character more fully next week.

NEW DALE.—R. Nineus, May 11: I am much pleased to say that since the day door has been taken off the air in the 75 fm. level cross-cut, and throughout both old and new mines, has greatly improved, and we are now in a position to put more men to work in the cross-cut, as from indications we have gone through more than one channel of ore ground, and I now beg to propose to cross-cut in these channels of ground. We are not up to this (3 P.M.) in the ore, but the character of the ground is such that ore has been always found in. We may, therefore, come into the ore at any time, but if it should not be cut in the direct driving of the 75 fm. level cross-cut, it cannot be far from it, as we have the right ground for ore, and in which ground the ore will be met with.

NEW DEVON CONSOLS.—Capt. Hancock, May 10: At Trewollock Mine the lode in the 32 south is looking more promising, with good squares of lead. The north end, in the 32, is without any alteration. In the 20 end north, towards the old mine, some good lumps of lead have been met with, and the lode looking more open, and letting out water freely.

NEW PEMBROKE.—P. Puckey, J. Puckey, May 9: In the 75 end, driving east of the engine-shaft, the south part of the lode is from 4 to 5 ft. wide, yielding some good work both for tin and copper, and worth 2*t*. per fathom. There is a north branch crossing the end, containing rich stones of copper, which will intersect the lode in a few feet further driving, when we expect a great improvement. The lode in the rise in the back of this level, behind the end, is 3 ft. wide, and of a very promising character, producing a little tin throughout, and worth 8*t*. per fathom. In the stopes in the back of the 75, east of the shaft, the lode is 2 ft. wide, and worth 10*t*. per fathom. In the stopes in the back of the same level, further east, the lode is 4 feet wide, worth 8*t*. per fathom, and is looking promising for improvement. In the 68, or middle level, the lode in the end, driving east, is 4 ft. wide, but a little disordered, containing rich branches of tin and copper, worth 18*t*. per fathom. In the stopes in the back of the 68, east of Truan's rise, the lode in places is 5 ft. wide, and worth for tin and copper 4*t*. per fathom. In the stopes in the back of the same level, east from the winze, the lode is 5 ft. wide, but in consequence of getting near the slide the lode is not so rich as when last reported, now worth for tin and copper 5*t*. per fathom. In the 60 end, driving west, east of the shaft, on the south lode, the lode has improved, and is 4 ft. wide, yielding good stones of tin and copper, worth 12*t*. per fathom. In the 60 cross-cut, driving north, east of the shaft, is getting wet, and is rather spare for driving. Our 80-in. cylinder-engine is almost ready to go to work, and we are progressing as fast as possible in fixing the pitwork, bobs, rods, &c., in the shaft, which is nearly complete to the 60 fm. level. In consequence of the very dry season, and the falling back of the weather, we have commenced to sink the shaft 2 fathoms below the 75, and shall then put in bearers and casters, and fix the bottom plunger-lift in the 75 before we put the engine to work; this will cause a little delay, but will save us considerable expense.

NEW TRELEIGH.—Sam. Michell, May 11: The lode in Nicholson's shaft is 3*t*. ft. wide, producing a little tin; there is a decided change both in the nature of the lode and the character of the ground about it—from a dark blue killas to a white softer stratum. The tinstaff now bringing to surface is very like that of Pever lode, and I fancy the latter is not far off the bottom of the shaft, and at the intersection there is no doubt these lodes will yield plenty of tin. I shall sink a coozen pit to see if the back of Pever lode can be discovered, so if it will be a guide to ascertain the distance between them in the 30 fm. level. The shaft sinking below the 20 has drained all the upper levels, and the large lode that we were working upon in the 20 is now quite dry. I have taken two of the men from the adit to blast some of the tin lode, and shall get a pile to surface, and see what the tin buyers will give per ton for it. Tin being at the present time at a high figure, a small quantity in such a large lode will pay for working. The lode in the adit level, driving west, is 4 ft. wide, composed of gossan, peat, mudiic, copper ore, and tin; all the lode must come to surface and be overhauled for the different sorts of mineral. I have given samples of tinstaff to several buyers of tin in the stone, and they all say the tin is of good quality. We have sampled a small lot, which will be sold in the course of a few days, and have also sampled from 40 to 50 tons of arsenical mudiic, the tenders for which will be given in on Saturday next; 12 tons of this mudiic contains tin, of which I have furnished the buyers with samples.

NEW WHEAL CHARLOTTE.—J. Tonkin, May 10: We have dropped the lift to within 3 fathoms of the 20 fm. level, which we find to be at least 23 fathoms below the adit, on Saturday last, and to-day I have been down to the 10 fm. level, 12 fms. from the adit. Both in the east part of the mine at east shaft and in the west part at Blakney's shaft I find that nearly all the lode has been worked away, as marked on the section plan, showing very clearly that the lode was rich for tin; we found a few parts of the lode standing. We set a pitch in the east part on one of the arches, and we expect to set another in a few days, and also two pitches in the west part; we have not yet sent up any of the stuff; as soon as we can drop the lift to the 20 we shall fit the skip-rope, and shall then be able to wind the stuff at a rapid rate; we intend to wind about 18 cwt.s. in a skip. We are pushing on the work of the stamps as fast as we can possibly do it. We expect to set the stamps by the end of next week to stamp the tin. The floors will be ready for dressing by that time. We are doing all we can to force on the work consistent with proper economy. We shall sell tin shortly after next pay.

NEW WHEAL TOWAN.—R. Pryor, May 11: No particular change has taken place in this mine during the past week. Friday next being our pay and settling, a full report shall be sent you.

NORTH CROFTY.—J. Vivian and Son, W. Thomas, May 12: In the 208 fm. level, driving west of Peiricker's shaft, the lode is 6 feet wide, producing tin and copper ore, to the value of 15*t*. per fathom. The two stopes in the back of this level are worth in the aggregate 45*t*. per fathom. We have resumed the copper stops in the bottom of the 196, where the lode is improved, now worth 30*t*. per fathom. In the 196 end west the lode is worth 15*t*. per fathom. In the winze, sinking under the 196 west, the lode is worth 22*t*. per fathom. In the winze, sinking under the 196 west, the lode is worth 18*t*. per fathom. We sold

on Thursday last 41 tons 10 cwt.s. 2 qrs. of copper ore, at 8*t*. 9*s*. 6*d*. per ton, realising 35*t*. 14*s*. 3*d*; and yesterday sold 18 tons 10 cwt.s. 2 qrs. 19 lbs. of tin, at 7*t*. 5*s*. per ton, realising 10*t*. 2*s*. 6*d*.

NORTH DOWNS.—Francis Pryor, James Williams, May 10: In the 70 fm. level, west of the western winze, the lode is split in two branches, both of which are containing a little ore, but not to value. Water is flowing freely from the end, which we consider a good indication. The fresh shoot of ore recently met with in the 60, west of King's shaft, still continues, and holds out promise of being important. We have no visible increase of water in this direction; the present end is worth 12*t*. per fathom. In midway level, above the back of the 60, there is no apparent change; the lode is worth 6*t*. per fathom. The rise in back of the midway level has gone up for the distance risen through a lode worth 6*t*. per fm., but in the present back a slide has crossed the lode and disordered it; we shall lose no time in getting above to prove its value. The pitch alluded to in the winze below the 60 in our last is again formed into a regular lode, and is producing good stones of ore. The stopes in bottom of the 60 fm. level, east of sump-winze, is worth 10*t*. per fm. The stopes in back of the 70, west of

the lode is worth about 30*t*. per fathom. In the winze sinking under the 61 the lode is 4*t*. feet wide, and worth about 25*t*. per fathom. In the 51, west of King's shaft, on No. 1 north branch, the lode is small, and not of any value. In the 51, west of King's shaft, on No. 1 north branch, the lode is 2*t*. ft. wide, and worth about 12*t*. per fathom. There is no alteration at other points to remark on.

SOUTH DARREN.—J. and Wm. H. Boundy, May 7: There is no particular change to notice in this mine since our report of last week. We have sampled to-day 18 tons of best copper ore and 3*t*. 2*s*. of second copper (composed).

SOUTH MERLLYN.—May 12: To-day being setting-day we beg to hand you the following report.—Vicker's Shaft: The 80 yard level south has been driven 5 yards 1 foot during the month, re-set for 5 yards, at 6*t*. per yard; the ground is harder for driving, consequently we have had to increase the price; the lode is about 1*t*. ft. wide, part of which we are saving for dressing purposes. The 80 yard level, north of same shaft, has been extended 8 yards; we have also sunk 4 yards under this level, and are still sinking; as soon as we reach the whole ground we will inform you, re-set at 3*t*. per yard.—Rudall's Shaft: The cross-cut west to intersect the lode at the 60 yard level north has been driven 4 yards 1 foot, the ground has been favourable for driving during the past month. We have offered the men a bargain at 3*t*. 10*s*. per yard, the ground is now somewhat harder. All the lead stuff now being drawn is carted to the dressing shed.

SOUTH VAN.—J. Richards, May 12: We are pushing on with the main shaft, and making arrangements for erecting the new water-wheel. The ground in the shaft is not so favourable for sinking, being harder, but less timber will be required in consequence. I expect the lode, when cut, will prove a good one.

SOUTH WARD.—T. Foote, May 10: Our progress in sinking Thomas's engine-shaft during the past week is very favourable, and good speed is being made.

ST. JUST AMALGAMATED.—R. Pryor, T. Gundry, N. Bartle, May 9: Setting Report: Saveall's Lode: The 100 to drive west of engine-shaft, by two men, at 2*t*. per fathom; the lode is 2*t*. ft. wide, worth 4*t*. per fm. The 90 to drive west of ditto, by two men, at 2*t*. 5*s*. per fm.; the lode is 3 ft. wide, worth 5*t*. per fm. The winze to sink below this level by two men, at 4*t*. per fm., the lode in which is 3 ft. wide, worth 4*t*. per fm. The 62 to drive east of shaft, by two men, at 6*t*. per fm.; the lode is 2 ft. wide, producing saving work for tin—a kindly lode. The 50 to drive east of cross-cut, on Wheal Bozans lode, by two men, at 2*t*. per fathom; the lode is worth 6*t*. per fathom.—North Lode: The 20 to drive west of north shaft, by two men, at 2*t*. 10*s*. per fm.; the lode is 2 ft. wide, worth 2*t*. per fm. —Owl Lode: The 40 to drive north of Redlupper shaft, by two men, at 7*t*. per fathom; the lode is worth 4*t*. per fm. The 10 to drive north of West Buck shaft, by two men, at 3*t*. 10*s*. per fm.; the lode is 3 ft. wide, worth 4*t*. per fm. The adit level to drive north of West Buck shaft, by two men, at 4*t*. per fathom; the lode is worth 5*t*. per fm., and promising an improvement. We also set 40 tribute pitches to 93 men, at tributes varying from 6*t*. 8*s*. to 16*t*. in 1*t*.

TAMAR VALLEY.—J. Goldsworthy, May 12: The 37 fm. level is being forced with all speed, and good progress is being made; the lode is exceedingly promising. The 27 south is producing good silver-lead ore, and promises to improve. The tribute pitches are without change to notice since last reported.

TANKERVILLE.—A. Waters, May 11: The shaft sinking below the 92 continues to go down in a course of ore nearly 14 ft. wide. The hanging-wall underlies faster than usual, whereas the foot-wall appears to be almost vertical, giving greater width to the lode every foot we sink. Brown's stope, in the back of the said level, 15 fathoms east of the above shaft, is in a course of ore worth from top to bottom of winze 8 tons of lead ore per fathom. We are preparing to bring drawing shaft down through the said stopes, and to fix the engine in the 74 over. All the parts of the engine, with boiler, are now underground, and no time will be lost in the erection of the machine. All other places in the mine yielding their usual quantities of ore. Watson's engine-shaft going down speedily. We expected a portable engine on the mine every day, and sampled 50 tons of lead ore on Monday last, making the sale for April 16 tons.

TAN-YR-ALLT.—R. Evans, May 11: The following is our setting report:—

The engine-shaft to sink below the 14 fm. level, by twelve men, the month, at 18*t*. per fathom; the lode in the bottom is still yielding from 4 to 5 tons of lead per fathom; the month; we have a fine looking lode, composed of quartz, gossan, and barytes. We purpose to commence sinking a new shaft 50 fms. west of the present engine-shaft to-morrow, in order to ventilate the run of ore ground driven over in the 14 fathom level, and also to enable us to open out ground speedily. The pay and setting passed off satisfactorily.

TERRAZ.—John Edwards, May 11: The engine and stamps were put practically to work on Monday, the 9th inst., and every part started not only well, but is continuing to work most satisfactorily. The stamping beds now having become compact and solid, we have to-day commenced to fill the passes and supply the stamps with the work. One of the round puddles is completed, and the three others nearly so; they will, I think, give perfect satisfaction.

THE LOVELL.—J. Nancarrow, May 11: We are pushing on the clearing of the adit, and expect to finish north of the great shaft about the end of this week. There are some large rocks in clearing levels for the wheel which have to be blasted, but we are, on the whole, making fair progress.

VAN CONSOLS.—T. Corfield, May 12: The cross-cut in the 30 is rather spare

for driving, extended about 10 ft. in a southerly direction. In the end there are streams of water coming out, showing there is a very strong part of the lode still ahead of us. For the last 4 ft. driven we have had a good lode of lead ore per fathom; the month; we have a fine looking lode, composed of quartz, gossan, and barytes. We purpose to commence sinking a new shaft 50 fms. west of the present engine-shaft to-morrow, in order to ventilate the run of ore ground driven over in the 14 fathom level, and also to enable us to open out ground speedily. The pay and setting passed off satisfactorily.

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preciation. Taquaril in demand. Tankerville dealt in to a considerable extent, and firm, and the tone of the market generally at the close is more satisfactory. Subjoined are the latest quotations:— Ashton, 8½ to 8¾; Tan-yr-Alt, 5½ to 6½; Van Consols, 4½ to 4¾; Tankerville, 17½ to 18½; West Tankerville, 2½ to 3½; West Chiverton, 67 to 59; East Caradon, 4½ to 4¾; East Lovell, 27 to 28; Great Laxey, 17½ to 18½; Great Vor, 10½ to 11½; Marke Valley, 6½ to 6¾; Prince of Wales, 16½ to 18½, 6d.; Van, 83 to 86; Anglo-Brazilian, 3½-lbs to 1-16th dis.; Anglo-Argentine, 1-16th to 1-3-16ths; Cape Copper, 9 to 10 prem., ex new; Capula, 2 to 2½; Chontalos, 1½ to 2; Don Pedro, 2½ to 3 prem.; Eclipse, 1-16th to 3-16th prem.; Frontino and Bolivia, 4 to 4½; General Brazilian, 1-16th to 3-16th prem.; Pacific, 6½ to 7½; Pestarena, 1 to 1½; Rossa Grande, 3-16th to 1-16th dis.; St. John Rey, 20 to 21; Taquaril, 7½ to 9½ prem.; United Mexican, 2½ to 2½; Yudanamutana, ½ to ½; Sweetland Creek, ½ to ½ prem.

The ESCARLLE SILVER-LEAD MINING COMPANY has been formed under most respectable auspices for the development, upon an extended scale, of a proved mine. Some influential members of the Stock Exchange are interested in the company.

At the Swansea Ticketing, on Tuesday, 2934 tons of ore were sold, realising 30,176. 8s. 6d. The particulars of the sale were—Average standard for 9 per cent. ore, 86. 7s.; average produce, 16; average price per ton, 10½. 5s. 8d.; quantity of fine copper, 469 tons 9 cwt. The following are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Price per ton.
March 8.	2,182	... 284 13 0	20½%	£13 1 7 ... 12s. 8d.
May 10.	2,934	... 86 7 0	16	10 5 8 ... 12 9

Compared with the last sale, the decline has been in the standard 11.7s., and in the price per ton of ore about 5s. There will be no sale on May 31.

The following dividends were declared during April:—

Mine.	Per share.	Amount.
Minera	£5 0 0	£29,000 0 0
Dolcoath	3 0 0	4,296 0 0
East Wheal Lovell	2 0 0	3,812 0 0
Marke Valley	0 4 0	1,800 0 0
West Wheal Seton	0 4 0	1,600 0 0
Trumpet Consols	0 15 0	1,500 0 0
Penhalis	0 5 0	1,250 0 0
Cook's Kitchen	0 7 6	918 15 0
Kronfloyd	0 1 6	900 0 0
Drake Walls	0 1 3	800 0 0
Wheal Jane	1 10 0	768 0 0
Boscastle	0 2 0	600 0 0
Cwm Eiffla	0 5 0	217 5 0
Scottish Australian	0 1 2	7200 0 0
Total		£34,662 0 0

At the Minera Mining Company meeting, on May 6, the directors declared a dividend of 9000d. (5s. per share), free of income tax, out of the profits of Lady quarter, due on and after May 14.

At East Pool Mine meeting, on Monday, the accounts for February and March showed a profit of 1256d. 10s. 10d. A dividend of 1280d. (4s. per share) was declared, and 19½ lbs. 11d. carried to the credit of the next account. [The report is among the Mining Correspondence.]

At the Gawton Copper Mine meeting, on May 4 (Mr. E. King in the chair), the accounts showed a credit balance of 3071. 5s. 5d. The committee of management were re-elected. A vote of thanks was given to Capt. Rowe, whose report appeared in last week's Journal.

At the Rossa Grande Gold Mining Company meeting, on Thursday (Mr. Henry Haymen in the chair), the report of the directors was received and adopted. Details in another column.

At the Vancouver Coal Mining and Land Company meeting, on Tuesday (the Hon. C. W. W. Fitzwilliam, M.P., in the chair), a dividend was declared at the rate of 15 per cent. per annum, which will absorb 612d., leaving 23d. to be carried forward. Details in another column.

COAL MARKET.—The market has been very moderately supplied with coals this week, only 58 ships having come forward. Business has continued steady, and all is cleared off at about last week's prices. Hetton Wallsend, 17s.; Haswell Wallsend, 16s. 6d.; South Hartlepool Wallsend, 15s. 6d.; Tees Wallsend, 16s. 3d.; Hetton Lyons Wallsend, 14s. 6d.; Tunstall Wallsend, 14s. 6d.—Unsold, nil; 15 ships at sea.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 165,755l., which is represented by a corresponding decrease in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there is shown an increase in the "public deposits" of 248,827l., in the "other deposits" of 337,592l., and in the "rest" of 8878l. together, 595,297l.; and a decrease in the "seven day and other bills" of 33,193l.—862,094l. On the other side of the account there was an increase in the "Government securities" of 35,411l.; and in the "other securities" of 163,184l.—198,595l., leaving an increase in the total reserve of 363,503l.

The directors of the Great West Chiverton Mine have received the first full report from Capt. John Nancarrow (manager of Great South Chiverton) since his recent appointment as their "superintending agent," which is made with his usual well-known caution, and will be found among our Mining Correspondence.

GORSEDD AND CELYN LEVEL.—The operations at these mines are being pushed forward rapidly, and the sinking of Coatic Glynn shaft has already commenced upon the great Holway vein. No doubt can now exist that upon the efflux of water the rich workings will be resumed with great important results—realising, it is expected, one of the prizes North and South Wales has recently produced. The workings made by former proprietors are very shallow, 70 yards from surface being the deepest point reached, yet from this depth 750 tons of lead have been raised, realising upwards of 10,000l. The late agent, in his report, states:—"The vein from which this ore was extracted appeared as strong and as promising as ever, when, owing to an influx of water, I was forced to suspend operations." The company's grant extends for nearly a mile (upon the course of the lodes proved immensely productive), occupying with a slight exception all the ground between the old Merlyn and Holywell Level Silver-Lead Mines.

MINING EMPLOY IN WEST CORNWALL.—Three very extensive mining concerns in the St. Just district, near Penzance—Botallack, Wheal Owles, Boscan—are now, collectively, about the greatest source of employ (to the mining community) in all Cornwall. At the monthly pay on Saturday last there were set in these three mines about 350 tunework and tribute bargains to the underground men; probably somewhere over 1300 persons are employed in them. They have 26 powerful steam-engines continuously working. Their various stamping-mills, worked by steam and water power, as well as their dressing-floors, are second to none in the county of Cornwall for their completeness and perfection of arrangement, all the most modern appliances for dressing tin ores having been introduced, at a great outlay. They have regularly at work somewhere approximating 300 heads of stamps, which are continually crushing tinstuff. The workings of these three mines are in close proximity to each other, the lodes being nearly all parallel, except the Great Crown lode, of Botallack, which is a guide, and takes a course about south, after passing the Chynorlton boundary of Botallack, across Wheal Owles, and from thence through the centre of Boscan Mine, where it intersects with numerous lodes and veins, and at these junctions rich deposits of tin ores are met with, principally at the 100, 110, and 120 fm. levels.

BOTALLACK MINE.—During the past ten days very valuable and important discoveries are reported (upon good authority) to have taken place at the celebrated Botallack Mine, situated in St. Just, near Penzance, at one of the most interesting points of operation in this extensive concern, known as "The Crowns." A large lode has been intersected at the very bottom of the diagonal shaft, which is now sinking below the 240 fm. level, and, to use an ordinary phrase of miners, the lode is said to be "the whole bigness of the shaft." It is supposed by some authorities that one of the Wheal Cock lodes has fallen in at this point, and formed a junction with the Great Crown lode; should this be the case it may lead to very rich fields of discovery. However, it would be very premature just now to form any opinion as to the value or character of the lode referred to, but it might be stated that it contains splendid stony veins of tin ore, and the indications are extremely kindly and promising. Some years ago this part of Botallack yielded rich copper ores to an enormous extent, and the present company received dividends in one year to the amount of 24,000l. The present shares were then readily saleable at about 500d. each. In a geological point of view, this sinking of the great diagonal shaft 250 fms. below the sea level (about half a mile out under the Atlantic Ocean) is one of the most interesting mineralogical researches in all Cornwall. One great question may now possibly be solved—whether (as in the case of Dolcoath, and other large mines in the Camborne district) this once rich copper-producing lode may become enormously productive for tin ore in the deeper levels beneath the copper at the higher mine of Botallack (known as the tin part of the mine), the lode in the 130 east is valued now at 25d. per fathom for tin (ground very favourable for driving).

The 130 north contains a lode estimated at 300 per fathom. In the 100, west from Carnorth, near the Wheal Cock boundary, the lode in the end is worth at least 30d. per fathom for tin. In the adit, east on the Wlunystock, the lode is also opening good tin ground.

ASHETON.—This mine has recently been inspected and reported upon by a well-known authority, who states that the workings at present are upon a continuation of an ancient deep adit level taken up close to the sea, and for about the first 50 fms. of driving by the present company a lode has been laid open, which is a mine of itself. The end south has recently considerably improved, and as there are thorough, from 16 ft. to 17 ft. wide in places, it can be stopped away very cheaply—3d. per fathom. Certainly, the vein will average over 2 tons per cubic fathom, and there are large reserves laid open. Nothing of importance has ever been seen below this adit, but in a few "sinks" that were made (and in which the water now is) it is said there is good ore, in which case there is a run of ore ground 200 fathoms long, or as much as in the best mine extant. The east and west lode, further north, which has been stopped away to surface by the ancients, presents every appearance of doing well in depth when the requisite machinery is erected. There are also other lodes in the sett well worth trying, particularly one running parallel to the great north and south one. The report concludes thus—"When the new shaft and machinery at surface are completed, which they soon will be, a great mine will be opened here."

The ESCARLLE SILVER-LEAD MINING COMPANY has been formed under most respectable auspices for the development, upon an extended scale, of a proved mine. Some influential members of the Stock Exchange are interested in the company.

Died.—At Upton House, Caldbeck, Cumberland, on April 30, Capt. JOHN VEROE, late of Bodmin, Cornwall, aged 60 years.

#### TO PRIVATE INVESTORS.

A GENTLEMAN is in a position to PROCURE for GENUINE INVESTMENT A FEW SHARES in a FIRST-CLASS UNDERTAKING likely to PAY THIRTY PER CENT. DIVIDENDS and upwards. These shares are now at 50 per cent. premium, and going higher. A few can be procured conditionally at par.

Bona fide Investors only need reply to "Lex," care of Davies and Co., Advertising Agents, Finch-lane, Cornhill, E.C.

#### TO CAPITALISTS, AND OTHERS.

COAL AND IRON STONE.—A valuable FREEHOLD and current-going COLLIERY and IRONWORKS in NORTH STAFFORDSHIRE TO BE LET on royalty, with option of purchase, or an active practical MANAGER, with adequate capital for the erection of blast-furnaces, would be treated with, on advantageous terms of PARTNERSHIP. The machinery, plant, and railway to be taken at a valuation, or a rental paid. Further information and particulars may be obtained on application to Messrs. SAUNDERS and LEWIS, Estate Agents, Surveyors, Valuers, &c., Full-street, Derby, and Waterloo-chambers, Temple-row West, Birmingham.

#### TO IRON OR COAL MASTERS, ENGINEERS, AND OTHERS.

THE ADVERTISER (a Scotchman), aged 40, presently engaged in London, will shortly be OPEN for a SITUATION as CASHIER, BOOK-KEEPER, or ACCOUNTANT in any large concern. He is an accountant by profession, and having been many years cashier and book-keeper in a very extensive iron and engineering works, is, in addition to a thorough knowledge of the duties of the counting-house, accustomed to correspondence, making up estimates and prime costs, and to paying large bodies of workmen. Address, "J. E. R. S.," MINING JOURNAL Office, 26, Fleet-street, London.

#### TO STOCK AND MINING BROKERS.

A GENTLEMAN is REQUIRED to ACT as BROKER and DEALER in SHARES, and to a respectable and reliable person satisfactory terms will be offered.

Address, "Shares," care of Mr. Wolpert, 69, Cornhill, E.C.

#### MINING IN WALES.

A INTEREST in a VALUABLE and EXTENSIVE MINING PROPERTY FOR SALE, to which a railway is now being completed. For particulars, address "G. and R.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

#### BLAKE'S STONE BREAKER.

WANTED, a SECONDHAND ONE; 15 by 7 preferred.—Apply, stating particulars, to "40 M.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

#### REAL SAFETY LAMP.

RECENTLY PATENTED. Gives twenty times more light than the "Geordie" Lamp, saving in the consumption of oil from thirty to fifty per cent. The lamp, by a simple contrivance, is self-extinguishing. HALF SHARE OF PATENT FOR SALE.

Apply to Mr. WILLIAM YATES, 21, Duke-street, Westminster, London, S.W. [This is the lamp referred to in the Times, of Thursday, as having attracted so much attention at the Conversations of the Iron and Steel Institute.]

#### STEAM ENGINE FOR SALE.—A 36 in. cylinder ENGINE, 8 s. t. stroke, equal beam, ONE 10-ton BOILER, and fly wheel 12 tons. The whole to be sold in One Lot. A great bargain.

For further particulars, apply to Mr. JAMES HICKIE, 22, Austin Friars, E.C.

#### TO BE SOLD, THIRTY-NINE VOLUMES of the MINING JOURNAL, dating from 1853 to 1869 inclusive, all but two being bound.

Apply to Mr. FRANK LEWIS, Auctioneer, &c., 38, Coleman-street, E.C.

#### BUDNICK CONSOLS.—TWENTY SHARES FOR SALE, at £4 per share. The mine is in 1000 shares only, and is selling tin at a good price.

Apply to "B. C.," care of Mr. Bassett, 56, Lincoln's Inn-fields.

#### TAVARONE MINING COMPANY, ITALY.—FOR SALE, TWENTY SHARES in this highly-recommended Mine, at 5s. discount.

Address, "Y. D.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

#### THE SWEETLAND CREEK GOLD MINES (LIMITED).—Notice is hereby given, that a GENERAL MEETING of the Shareholders in this company will be HELD at the London Tavern, on FRIDAY, the 27th instant, At One o'clock precisely, to DECLARE a DIVIDEND, and transact the general business of the company.

By order of the Board, W. J. LAVINGTON, Secretary.

The Transfer Books will be closed from the 20th instant until after the meeting.

9, Union-court, Old Broad-street, E.C., May 12, 1870.

#### THE PERKIN'S BEACH MINE (LIMITED).—Notice is hereby given, that the FIRST ORDINARY MEETING of the members of the Perkin's Beach Mine (Limited) will be HELD at the George Hotel, Shrewsbury, on THURSDAY, May 19, 1870, at Eleven o'clock A.M.

By order of the Board, E. H. C. BRISTOWE, Secretary.

Registered Offices, Swan Hill, Shrewsbury, May 9, 1870.

#### HOLYFIELD LEAD MINING COMPANY (LIMITED).—Notice is hereby given, that at a MEETING of Directors of the above company, held at Alston on the 11th inst., it was unanimously resolved that NO FURTHER SHARES should BE SOLD under ONE POUND FIVE SHILLINGS PER SHARE, or FIVE SHILLINGS PREMIUM.

By Order, R. PERCY ROBERTS, Secretary.

#### NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OZELLS STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—REFINED METALLIC NICKEL.

REFINED METALLIC BISMUTH.

OXIDE OF COBALT.

GERMAN SILVER—IN INGOTS, SHEET, WIRE, &c.

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## Notices to Correspondents.

\*\* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

COAL IN PARIS.—As a constant reader of your valuable Journal, I have been much interested in your recent articles on Continental Mining. I should feel greatly obliged if any of your correspondents could favour me with the price of the best household coal in Paris (both English and Belgian), delivered at the houses, including the octroi.—INQUIRER.

TANKERVILLE MINES.—It is stated in last week's Journal that Mr. Thomas Rosewarne had inspected these mines, and was prepared to give advice upon them, &c. Mr. T. Rosewarne has never been underground at Tankerville.—ARTHUR WATERS : Brook House, Abbey Foregate, Shrewsbury, May 10.

THE VAN MINING COMPANY.—In reference to the advertisement of Mr. T. Rosewarne, inserted in last week's Journal, I beg to inform you that he has not inspected this mine for many months, unless a walk through the dressing-floors about a fortnight ago can be called an inspection.—W. J. LAVINGTON, Sec.

PENHALLS MINE.—We regret that the dividend of 5s. per share, declared by this company on April 29, was omitted in last week's Journal.

Received.—"Incredulous"—"J. K."—"T. N."—"W. Gibson"—"W. S. P."—

"A Coalmaster."—A pressure on our space compels us to defer several letters intended for insertion in this week's Journal.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL,  
Railway and Commercial Gazette.

LONDON, MAY 14, 1870.

FAVOURABLE RESULTS OF AMERICAN TARIFF  
LEGISLATION.

We have information from the iron-making districts which fully confirms the views we have expressed as to the probable effect of the legislation in Washington upon the duties imposed upon iron and steel imported into America. There can be no doubt that if the duties which the House has shown itself to be in favour of should ultimately become law, somewhat better than the old days will have returned to the old iron-making districts, so far as it relates to the trade with America; and that the newer districts will receive an immense impetus in the demand for railway iron and steel in particular. Already we know of one house that has been oppressively filled with work demanded exclusively because of the anticipation by importers, on the other side of the Atlantic, that the reductions upon pigs and some of the leading kinds of finished iron may come into operation in October. Improvements, though in a less conspicuous degree, are likewise reported in other quarters, all with the same anticipation. Then there are enquiries coming over which indicate an extension of the anticipations here mentioned, but entertained with some less assurance as to the ultimate issue of what is now taking place. These latter people, watching narrowly the tactics of the Iron and Steel Association in their country, are undecided that the Bill will not even yet be abandoned. But the success which has thus far attended the free trade reaction has been so much more decided than they had anticipated that, if presently they should see that the changes will become part of the enacted statutes, they desire to be prepared to avail themselves to the utmost of the benefit which would be within their reach. Hence they are asking quotations for quantities which far exceed any to which correspondence has related for several years past. And this is taking place at the same time that purchases of pig and finished iron are being made in this country by Americans, who have brought with them many thousands of pounds which they will invest in placing orders at the furnaces and mills of Great Britain. Not alone, therefore, our own anticipations previously ventured upon, but likewise American negotiations, and actual business done within the past few days, tend to emphasise the importance to the iron and mining industries of these kingdoms of the new Tariff legislation to which the *Mining Journal* has not hesitated to give some prominence.

The telegram which we published last week, showing what the House of Representatives had done in respect of steel-wire, steel railway frogs, and steel car-wheels, so far as this could be shown in a hurried brief telegram, merits a little more attention. Interpreted, it means that steel-wire, not less than No. 13, upon which the present duty is 2½ cents per pound, and 20 per cent. *ad valorem*, and which the protectionists desired should carry a duty of no less than 5 cents per pound; and that steel-wire less than No. 13, which now pays 3 cents per pound, and 20 per cent. *ad valorem*, yet was desired to be put up to 6 cents per pound, shall both henceforth bear no heavier impost than that now charged upon them. Steel railway frogs, fish-bars, side-bars, splice-bars, and the like, are now made to pay a duty of 45 per cent. The Pennsylvania ironmasters desired to make the new duty 3½ cents per pound. The free traders in the House did all they were capable of accomplishing, though they did not do all they wished, and the result was that the new duty was fixed at 2½ cents per pound. Steel car-wheels pay the same duty as frogs, and the like—45 per cent.; and the Iron and Steel Association desired to raise the impost to 3½ cents per pound, the same as in the case of frogs. Here, again, they were opposed as stoutly as may be, but it is clear that the iron and steel masters of America are more powerful in the Legislature of that country than are the holders of railway property, who have no immediate interest in the iron and steel works there. The free traders were unable to bring wheels down to the level of frogs, and had ultimately to be content with a new duty of 3 cents.

Considering how regular has been the success of the protectionist iron trade party in America in past time, and how steadily they have been able to put up the duties year by year, to have checked the onward progress of monopoly is a great deal. Unable to do more, the free traders did this in the divisions during which the three kinds of steel goods we have specified were debated. In one case, it will be seen, they were able altogether to stop an onward movement; in the other two they were able only to hold it back a little. The telegram, as written, would lead to the inference that higher duties were only shocked in each of the three divisions which took place, for it would seem as if 20 per cent. were added to the 2½ and 3 cents respectively previously levied upon steel wire; but, as we have intimated, it was part of the old duty. It was, therefore, only re-imposed with the 2½ to 3 cents per pound. How the protectionist iron and steel masters of the United States would fight their competitors in this country is manifest enough, even in respect of the three classes of steel goods we are here discussing. The 2½ and 3 cents per pound on steel wire of the sizes we have indicated means from \$56 to \$67 20 cents, or, at the present rate of exchange, from 11l. 8s. 7d. to 13l. 14s. 11d. This is, therefore, the present, with 20 per cent. *ad valorem* added. Now, what would our friends on the other side have made British steel wire bear?

A duty simply of \$112 to \$134 40 cents, or in gold from 22l. 17s. 2d. to 27l. 9s. 10d. per ton. They would have made steel railway frogs pay \$72 80 cents, or 14l. 17s. a ton, but the House made them accept \$56, or 11l. 8s. 7d. gold, thus securing a difference in our favour upon the proposed duty of 23 per cent. Steel car-wheels they would have made to bear \$78 40c., or 16l. 0s. 2d. present exchanges; but the House fixed \$67 20c., or 13l. 14s. 11d., a reduction still in our favour upon the proposed rates of 14 per cent. We need recapitulate what has been effected in respect of iron and steel previously discussed in the House, and set forth in earlier notices in these columns; but it will be interesting, as showing the capacity of the American iron industry, just to set forth what since 1860 they had succeeded in accomplishing, and what they would have still further accomplished in the Bill now under debate. This will be pretty fairly seen by the following few figures:—

	Present Increase over 1860.	Proposed Increase over 1860.
Hoop iron, size 3/4 inch .....	196 per cent. ....	246 " ....
Hoop iron, size 7/8 inch .....	212 "	264 "
Hoop iron, size 1 to 2 inches .....	239 "	285 "
Plough steel .....	455 "	700 "
Steel rails .....	45 "	98 "
Railroad iron .....	85 "	230 "
Flat iron .....	294 "	255 "

The monstruousness of the fiscal legislation of the States was never more strikingly demonstrated than in the hot debate which took place in the House of Representatives on Thursday week (May 5), on the Bill providing for Government grants of land in aid of the Northern Pacific Railroad. Would it be believed that that Bill contains a section restricting the company to the use of American rails! No wonder that such a section should be denounced as the result of a corrupt combination of land speculators and high tariff members. In the interest of fair government, and in the narrower, but, perhaps, more immediately pertinent, consideration of the prosperity of British iron and steel making, we rejoice greatly that when, on Wednesday afternoon last (May 11) the question again came on, the House, in discussing a resolution to allow the Northern Pacific to issue mortgage bonds, and giving large land grants, rejected a motion to pass it to a third reading by 91 to 77 votes. The resolution was then committed to the Pacific Railroad Committee, with several proposed amendments, one providing that nothing in the resolution should be construed as a guarantee by the United States of bonds issued by the company. This defeats the resolution for the present, and is considered as damaging its prospects.

The *Times* Correspondent, writing from Philadelphia on April 29, says of the Tariff Bill:—

"The debate on the details of the Tariff Bill in the House has progressed far enough to show that the majority is in favour of reducing the duties on iron and steel. As a consequence the Pennsylvania members now declare their determination to oppose the final passage of the Bill, while the Committee of Ways and Means, in order to save the balance of the measure, have abandoned all attempts to keep up the iron duties. There are sharp and bitter speeches constantly made, but in every vote the protectionists are defeated. The free-traders are also elated with the prospect that already one of their number has introduced a Bill providing for a general reduction of duties. The pending high Tariff Bill is doomed; and, although the friends of lower duties may not be able to do anything, it is plainly demonstrated that the protectionists are also powerless. The probability is that the Tariff will remain as it is."

Let the foregoing be read in connection with our opening remarks, and likewise with the following, which we take from our contemporary, the *Economist*:—

"There is the more reason for watching the movement because the causes we have pointed out are not likely to cease. Manufactures of all kinds are certain to languish; prostrate industries, like shipbuilding, are certain to lie prostrate; there will be difficulty in tracing the suffering of some interests to the attempts to protect others; the quarrels between the protected interests can hardly fail to increase. Even if America should participate, as it may, in a general recovery of trade throughout the world, and the producer get better prices through some sort of chance in his favour, much distress will still be left, and the producer may be slower of belief, after his late experience, that the higher price is due to protection. The change of opinion, having begun, will almost certainly go a good way. For that reason it should be observed, as we have so much interest in the result—that we may be slow to entertain the conviction—that the triumph of free trade is likely to be complete and speedy."

## COAL-GETTING MACHINERY.

There is now every prospect that greater advantage will be taken by colliery owners of machinery for getting coal than has hitherto been the case. Up to a comparatively recent period, of the many machines made and patented for superseding the raising of coal by hand only some two or three were at work in the kingdom, the principal and most successful of which is probably that of Messrs. FIRTH and SON, of Leeds, and which has been kept continuously going at East Ardsley for the last two or three years. The great objects of inventors in producing machinery for getting coal are economy in working, getting the mineral without producing as much slack as by hand, and the doing away with the danger consequent on holing or roof falling down upon the collier, whilst his body is partly inserted within the groove he has been cutting.

Amongst the recent inventions which have been brought before the public may be mentioned that of Mr. CHARLES BAETHOLOMEW, of Doncaster, the specifications relating to which have not yet been completed. One of the oldest patentees of coal-cutting machinery is Mr. G. E. DONISTHORPE, of Bedale, near Leeds, who has just paid the duty for a patent consisting of "Improvements in Apparatus for Cutting Coal and other Mineral." Mr. DONISTHORPE is the patentee of a horizontal, traversing, slotting machine, and which has been worked at Messrs. POPE and PEARSON's West Riding Colliery, at Normanton, near Leeds. The machine traverses along the working face of the coal, and cuts out a horizontal slot or groove along the bottom of the seam: the number of strokes made by the tool was from 75 to 80 per minute, the width of the groove made at the face of the coal not being more than 3½ in. in holing to the full depth to which the machine can work. Mr. DONISTHORPE is very sanguine as to the results which will be obtained by his new machine, and informs us that he feels confident that it will do at least three times as much work, at a given cost and in a given time, as any other machine has yet done. Messrs. GARRETT and MARSHALL, of Leeds, whose machines have been noticed in the *Journal*, it is worth noticing have just received an order from Japan for two of them, which are to be used in the coal mines near Nagasaki, whilst there is every reason to believe that they will be followed by others.

Of the new machines which have been recently tested, those of Mr. HURD, of the Albion Works, Wakefield, are making rapid progress in the estimation of colliery owners, and are about to be put down in several collieries in Yorkshire and Lancashire. The work done by one of the machines in a trial at the Wharncliffe Silkstone Colliery, near Sheffield, was so highly satisfactory as to induce not only the Wharncliffe Company, but others, to introduce them into their pits. Yesterday (Friday) Mr. HURD put one of his machines down in the Platt Lane Colliery, near Wigan, being the first double-cylinder machine that has been made. It will commence working at once, as the necessary piping and apparatus have been for some time in the pit, in the deep seam, and we purpose giving the result of what it has done in next week's *Journal*. Mr. HURD is also engaged in making the necessary air-compressing machinery for the Tinley Colliery, where one of the machines will be put down, and where it will work in concert with that of Messrs. FIRTH and SON.

To show that the invention of Mr. HURD can be adapted to meet the varied requirements found in raising coal and ironstone, it may be stated that he is about to make some machines to be worked by hand, and which will be used in raising ironstone from the West Ardsley Company's pits. Mr. HURD states that the hand machines will undercut 4 yards per hour; and, if such is the case, we may look forward to their being adopted in a large number of our collieries. The invention promises to be a very valuable one, and we shall endeavour to give the results of the work done by both the power and hand machines, so that those interested will have an opportunity of judging how far they are calculated to benefit the colliery owner, and decrease the mortality from accidents in our coal mines.

EXPORTS OF RAILWAY IRON.—The exports of railway iron from the United Kingdom declined considerably in March, but there was a great revival as regards India. The shipments to the United States in March amounted to 23,222 tons, against 40,152 tons in March, 1869, and 23,329 tons in March, 1868. The exports of railway iron to the United States in the three months ending March 31 amounted to 80,760 tons, against 82,512 tons in the corresponding period of

1869, and 56,271 tons in the corresponding period of 1868. British India took 57,695 tons of our railway iron to March 31 this year, as compared with 11,888 tons in the corresponding period of 1869, and 27,053 tons in the corresponding period of 1868. Upon the whole, our exports of railway iron amounted to 209,151 tons, against 148,206 tons in the corresponding period of 1869, and 120,027 tons in the corresponding period of 1868. The value of the railway iron exported from the United Kingdom was 564,261*s.* in March, as compared with 504,467*s.* in March, 1869, and 343,867*s.* in March, 1868; and in the three months ending March 31 this year 1,683,765*s.* as compared with 1,119,510*s.* in the corresponding period of 1869, and 929,684*s.* in the corresponding period of 1868.

THE IRON TRADE.—The Government of India has dispatched Mr. Lee Smith, engineer of the Punjab Northern Railway, to England, to make arrangements for the supply of a considerable quantity of ironwork, required for great bridges on that line. The Government of Victoria has invited Belgian firms to compete for rails required for lines in that country.

THE WIRE TRAMWAY.—The exhibition line at Brighton is still being worked daily, every afternoon, but it may be well to mention that after May 23 it will be in operation on Saturdays and Mondays only until Sept. 30. It has already been visited by a large number of engineers, and others interested, and many orders for important lines in various places have been taken. The locality in which the line has been erected, and the intentionally difficult route chosen in order to test the invention to the utmost, were fully referred to in the *Mining Journal* of April 16. The line being five miles in length, and extending far across the open Downs, it should be stated, perhaps, that the engine-house and driving gear are immediately behind the gas works, to the east of Kemp Town, and that it is to that point that visitors should proceed in order to obtain all information concerning the line from the inventor, Mr. Hodgson, or from his agent, Mr. M. Beale, who will be present during the working of the tramway to supply it. The utility of the invention for the transport of minerals, especially in difficult countries, was pointed out when the invention was first introduced: the working of the Brighton line more than justifies their most sanguine expectations.

## REPORT FROM THE NORTH OF ENGLAND.

Middleborough, May 12.—There is little alteration to note as to the state of trade this week. From all parts of the district reports the most favourable are heard of the present condition and prospective appearance of the iron industry. Pig-Iron prices were very firm on "Change here on Tuesday, and the expectation expressed some two or three weeks ago that rates would further improve seems in every way likely to be realised. No. 1 iron was sold for 51s. 6d.; No. 3, 51s.; No. 4, 50s., net cash on trucks, or f.o.b. at makers' works, and we heard of one or two houses that were quoting even above these rates. At the close of the market the prices were exceedingly firm, a state which the Cleveland Ironmasters' Association return for April did not in any way tend to check. The return shows that the stocks in the district have considerably increased—makers' stocks upon March by 4160 tons, and warrant stores 3560 tons. A decrease of 2499 tons is shown on the make for the month of April as compared with March. The entire stock in makers' hands is, however, only 71,267 tons, a comparatively light total, representing as it does only about a couple of weeks' manufacture. The new furnaces in the district are being pushed on to completion as rapidly as possible, and the already enormous power of pig-iron production will shortly be augmented by the blowing in of new furnaces.

In the Rail and Finished Iron branches all is life and activity. Rail makers are full of work, and the production of the mills is just now very heavy; deliveries, also, are exceedingly large. The capabilities, too, of Cleveland for the manufacture of rails is about to increase. A new firm has just been organised, which has for its intention the erection of rail-making works of considerable dimensions at Eston Junction, where land has been secured. Mr. Bernard Samuelson, M.P., and Major Elwon are the leading partners, we understand, and they purpose starting without delay to put up machinery that it may be ready for next year's rail trade, when they hope to be able to roll about 1000 tons of iron per week. There is a rumour also of another company as likely to be commenced. Iron shipbuilding in our midst continues very animated. Specifications are, perhaps, not quite so numerous, but there is, nevertheless, a heavy demand. Messrs. Backhouse and Dixon, of Middlesborough, are said to have now in course of erection 13 new vessels, representing, probably, an aggregate of 50,000 to 60,000 tons; and other firms in the same line of business on the three rivers of our neighbourhood—the Tyne, Wear, and Tees—are reported to be well off for orders. Engineering—especially marine-builders are briskly employed. Messrs. Thompson, Boyd, and Co., of Newcastle, were the builders of the 80-horse power compound surface condensing engines, fitted into the Vladichik, an iron paddle-steamer, which Messrs. C. Mitchell and Co., of Low Walker, launched from their yard last Thursday.

The Board of Arbitration and Conciliation of the North of England Iron Trade held an adjourned meeting on Monday, at Darlington, to resume consideration of the question of "fettling."—Mr. J. T. Bell, President of the Iron Manufacturers' Association, reported to the board that, in accordance with the understanding come to at the last meeting, the employers had had a meeting and fully discussed the question, and they had passed resolutions expressive of the opinion that "fettling" by puddlers on Sunday might be dispensed with consistently with starting the works on Monday morning, by doing the main part of the "fettling" on Saturday afternoon, and in cases where furnaces needed extensive repairs by "fettling" on Sunday night. The practicality of this proposition was questioned by some of the operative members, but eventually the following resolution was unanimously adopted, it being understood that the conference therein recommended should take place within a fortnight:—"That, inasmuch as it is the practice of some works to do no 'fettling' on Sunday, and yet to work for the most part on Monday, this board advises that the employers and puddlers of the several works connected with it confer as to the practicability of adopting a like system (which this board consider very desirable), and that they be invited to express their opinion by ballot."

The Northumberland and Durham Miners' Permanent Relief Association annual meeting was held on Saturday last in the Town Hall, Durham. Mr. John Howie presided. There was a large attendance of delegates. The business of the meeting was opened by the secretary (Mr. A. Blyth) reading the annual report, from which we make the following extracts:—Our numbers have still continued steadily to increase. Upwards of forty public meetings, in connection with the society, have been held during the past year, which certainly have done much. The public by this means, together with the publication

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daily progressing on the road to free trade. There is a steady action at work to remove all duties on raw materials. Session after session in the German Zollverein Parliament has been brought up for discussion. This year the reduction on iron would have been lost again owing to the Government taking to the proposal a corresponding increase on other necessaries, and only on the last day of the session a compromise was arranged between the House and the Government, whereby the following reductions were effected:—5s. per ton on pig-iron (formerly 10s.); 1s. on bar iron; and 9s. on the plates: these reductions to come into force on Oct. 1. In Belgium, where iron ore is getting very scarce, there is much agitation for the abolition of the present duty of 4s. per ton on pig-iron. In France the system of drawbacks on foreign pig-iron has been much abused, and has completely broken down. The law enacted by the Olivier Ministry for the better regulation of these drawbacks gives unusual dissatisfaction, and nothing less than a reduction of the import duty will satisfy consumers.

Much excitement was got up about a fortnight ago on a rumour that the American import tariff on pig-iron was to be reduced by 8s. per ton. The proposal certainly was carried by the House of Representatives in committee, but it seems to be forgotten that the measure had to run the gauntlet of Protectionist Senate. I am informed, on good authority, there is but small chance of its passing that body at present. In any case the reduction would only begin next year, so that shipments would be almost entirely stopped till then. The reduction in the American tariff has been made a potent engine for market operations in Glasgow and Middlesborough. The Scotch market has been fluctuating rather wildly between 5s. 6d. and 5s. 8d. cash, for warrants, according as the "bull" or "bear" party had the best of the fray. In Middlesborough the movement had but scant success, as we are comparatively free from the influence of speculative operators. The market continues very steady; prices on "Change to-day quoted as follows:—No. 1, 5s. 6d.; No. 3, 5s.; No. 4, 5s. f.o.b. Fees.

The trade in Manufactured Iron is satisfactory. All the mills and forges have as much as they can do for some months to come. My advices from the Continent report great activity in the rail mills. In Westphalia and Belgium especially the works are full for this year, and many order books are filled up till the end of next year also.—C. E. MULLER: Middlesborough, May 10.

#### REPORT FROM SCOTLAND.

*May 11.*—From what we said last week, the readers of the *Mining Journal* will be prepared for unaccountable and, perhaps, violent fluctuations in the price of Pig-Iron in this market.

The leaders of the "ring" of 1866 are again trying their hands in the same direction, and possibly with the same result. "Forewarned, forearmed" is a proverb we need not repeat in the ear of those who then suffered, but we remind those who may be drawn in by the suction of keen speculation that they may reap all the bitter, without ever once tasting the sweet. The market for the greater part of the week has been very active, and warrants have been changing and advancing, but unfortunately shipments during the last few weeks have exhibited a decrease, and were for the eight days just ended only 11,915 tons, against the larger amount of 14,525 tons in the corresponding week of last year. The home trade must, therefore, be consuming all the extra demand, and more, in order to bring up shipments to an average. Some of the German houses here are, however, said to have it on authority that the duty in North Germany has been reduced 5s. a ton, although the telegram makes a muddle of it. This will do us some good, and as it seems we alone have iron and to spare speculation will only have a profitable game to play amongst us. Consider the advice of the old Latinus—*respite finem*—before coming to such a conclusion. When the market closed last week warrants were run up to 57s. 7d. cash, and 58s. a month, and these prices were obtained on Monday forenoon, but closed 1s. per ton worse. Tuesday forenoon the price was up to 57s. 9d. cash, and 58s. a month, but 57s. 8d. cash, and 57s. 11d. 30 days, was accepted at the close. The market was steady to-day, and good business was transacted at 57s. 7d. and 57s. 7d. cash, and 57s. 10d. to 57s. 11d. a month, closing firm, buyers at best. No. 1, g.m.b., 57s. 9d.; No. 3, 56s. 3d.; makers' iron, all No. 1 brand—Gartsherrie and Coltness, 65s. 6d.; Summerlee, 62s.; Langloan, 61s.; Shotts, 60s. 6d. Finished iron is quoted easy, with all the mills steadily going, the threatened puddlers' strike notwithstanding. In fact, Blochairs has already been struck for 6d. per ton advance, but they told us there, on making enquiry, that they could work without puddlers—of course, for a time. We learn that, by a resolution of the representatives of the various works in this and the Coatbridge districts, the whole of the workmen have been informed that if the agitation is not stopped, and the Blochairs puddlers return to their employment within a fortnight, all the works will be closed against them. The men have resolved to support those on strike at Blochairs, and there are fears expressed that the game is the men's, if they choose to go in and win. On Monday evening a meeting of delegates was convened in Coatbridge from the iron districts, at which it was unanimously resolved to support the Blochairs puddlers; and it was further agreed to meet again on Saturday evening, for the purpose of considering the whole circumstances which may have up to that time emerged. The hammermen in the employment of the Glasgow and South-Western Railway at Killmarney have struck work for an advance of 1s. per week. The locomotive and tube makers are very busy, the tin trade is brisk, and the coppersmiths and brass founders to shipbuilders are all fully engaged. A number of fire-engines for Russia were offered here a day or two ago, but as they had to be delivered to time they were not accepted. Mr. Morton, of the Airdrie Iron Company, has purchased the Old Tan Works, in Airdrie, for the sum of \$10,000.

The Coal Trade is moderately busy, with shipments which show a considerable decline, being only 25,545 tons, against the larger total of 32,995 tons in the same week last year. The quotations are barely maintained, but are not yet quoted less. Mr. Alexander McDonald, however, at a meeting of miners held here on Monday, "took the liberty" of declaring "that the position of the trade, present and prospective, warranted the men making a demand for more wages, and insisting on it being got; and also that the hours of labour should be shortened." It was then moved that each pit should at once appoint a deputation to wait upon their employers and make another demand for the advance of wages, which was carried unanimously. Another meeting was held at Maryhill, yesterday, when he again counselled the miners to urge an advance, as a more "opportune period had not occurred for doing so for the last 20 years." The miners were easily persuaded, and they are to meet on Monday next to hear the replies from the masters, and to take further action.

#### TRADE OF THE TYNE AND WEAR.

*May 12.*—The supply of ships has not been quite so good lately, but yet sufficient to keep the works steadily going, and most of them are well employed, with a good prospect. The coking coal works in South Durham are extremely busy, and the output of coking coal is to be increased whenever it is possible to do it. The New Brancepeth Collieries have been taken in hand by Mr. John Marley, mining engineer, of Darlington, and other gentlemen, and the works will shortly be put into a state sufficient to put out a considerable quantity of coking coal. A new shaft is to be sunk forthwith, and suitable engines erected for raising the coal. The Iron and Engine Trades continue to improve steadily, and most of the works are well employed. The new works lately started are receiving a fair measure of support—that is, the new rolling-mills at Dunston, and the new foundry of Messrs. Richardson and Co., of Gateshead. A large new foundry has also been erected by Messrs. Abbot and Co., Gateshead, which will prove a valuable addition to those old-established and extensive works, as castings of the largest size can be turned out in large quantities. The water which was let in to part of the works of the Hutton seam, in Felling Colliery, has been got out, and work will be resumed immediately. The water has been got out of the Hebburn pits nearly down to the level of the Low Main seam, and coal will be raised very shortly. As this seam is standing entire, having never been worked, an extensive colliery will shortly be opened out, as the workings in the Bensham seam will also be soon opened out, a large quantity of excellent house coal still remaining unworked in that seam. It may be expected also that when the coal is opened out at Hebburn the reducing of the water at Wallsend will shortly be proceeded with, and the High Main seam, which contains a large quantity of excellent house coal, will be also opened out.

**COAL-CUTTING MACHINES.**—It is remarkable that in this district at least coal-cutting machines have made little progress as yet, although the most strenuous efforts have been made to turn them to practical use. There can be no doubt whatever that this is one of the greatest wants of the age in connection with mining—that is, machines at once effective and economical, for driving drifts and adits, and for cutting down coal and other minerals; and it is hardly likely that in an age which has produced so many mechanical triumphs, this problem will remain long without being solved. The cutting-machine which was worked for some time at the Kippax Colliery, near Leeds, by hydraulic power, was fully expected to prove a decided success; from some cause, however, it appears that these hopes have not been realised. Two machines of the same kind were introduced at the Netherton Colliery, in Northumberland, for the purpose of cutting the coal in a thin seam there, and the most sanguine hopes were entertained that those machines would prove highly successful; however, after a trial, extending over a very considerable period, with varying success, they have been discontinued there also. But, as remarked above, it is not likely that this project for cutting coal will be relinquished yet; another machine, expected to possess

great advantages over all others yet tried, is shortly to be brought under the notice of the mining world. Mr. Wood, of Leeds, has got this machine very nearly completed, and we shall give further particulars concerning it very shortly. It is expected that this remarkable machine will shortly be inspected and reported upon by eminent mining engineers, previous to its actually being tried in a coal mine.

The strike at Monkwearmouth has, as was predicted in this letter, proved a great mistake on the part of the men; there really were no just or plausible grounds for a strike. The number of men at work continues to increase very rapidly, part of them being strangers from other districts, and a considerable number have already left the body of strikers and started work. The high wages made at present are certain to attract numbers of workmen, as from 7s. to 8s. per day is the current rate earned at present. Of course, this is considerably more than the ordinary average rate of wages when the works are full of men. Of course, as a rule, the best places are certain to be occupied, and also the men at work are certain to be well supplied with tubs. The result of the strike, however, has abundantly proved that the average rate of wages earned at Monkwearmouth has not been below the wages earned in the district. At present, when the men have every advantage, they can earn wages amounting to from 7s. to 8s. per day; and when the works were full of men the average earnings were about 4s. 5d. per day, certainly equal to the average run of the district. It has also been satisfactorily proved that the rate of wages has not decreased during the management of the present viewer, but the contrary. However, there is little doubt that this strike has been mainly caused by the ill-feeling and discontent produced by the Union agitators, and the strike will now shortly terminate; and, under the able and excellent manager of the works, the colliery will continue to be worked most prosperously and safely for all concerned, both workmen and masters.

**NORTHERN INSTITUTE OF MINING AND MECHANICAL ENGINEERS.**—At the meeting on Saturday there was a good attendance of members and others, the chair being occupied by the President, Mr. E. Boyd. A number of gentlemen were elected, and others were nominated for election at the next general meeting. The meeting intended to be held in Glasgow continues to attract much attention, and it is expected that several valuable papers will be specially prepared for it by mining and mechanical engineers. A very interesting paper was read at the meeting by Mr. John Rutherford, of Nova Scotia, "On the Coal Mines of Nova Scotia." The paper attracted much interest, as might naturally be expected from the locality of the mines described, and their most remarkable nature. The great thickness of some of the beds of coal in this colony is one most peculiar feature, and the quality of the coal is also extraordinary; some of the beds, it appears, reaches the enormous thickness of 28 ft., a very considerable portion being of excellent quality, producing excellent hard steam and other coals. The paper is exceedingly well illustrated by maps and diagrams, and when the time arrives for its discussion a most useful and interesting debate may be expected, of which a report will be given in the Journal.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

*May 12.*—The iron works in North and South Derbyshire, and also those near to Nottingham, are doing a fair business, whilst a large number of furnaces are in blast. The Coal Trade is by no means so active as it has been, more particularly with regard to household qualities, whilst the tonnage going to London is now considerably less than it has been. Steam coal is in rather better request, with every prospect of a further improvement as the season advances. Sinking operations are being carried out in the Unstone Valley, and it is said that shortly some new works will be opened out, and the valuable minerals which run through the district—coal and iron-stone—developed. In anticipation of such taking place, a large number of houses for the workmen are about to be erected. The new station at Chesterfield, rendered necessary by the large increase of traffic, is fast rising into shape, so that improved facilities will be given to the rapidly increasing trade in coal to the South and West of England which is being done from the district.

The works in Sheffield and Rotherham engaged in the heavy Iron Trade are kept well going, particularly in heavy plates and railway material. Bessemer steel is in active request, and there are some large orders in hand for rails and the plain material. The collieries in the South Yorkshire district are far from being well employed, nearly all of them working short time. There is a little more doing in Steam Coal for shipment. With regard to the effort which is being made to have coal sent direct from the collieries to the various ports for shipment, without the intervention of third parties, in the shape of merchants, there was a meeting of the Steam Coal Owners' Association at Doncaster, on Saturday, and which was influentially attended. It was agreed that business should be commenced shortly, and the necessary offices taken for carrying on operations. The monopoly long enjoyed by Mr. Josse and others, at Hull and Grimsby, has been very injurious to the coal owners of South Yorkshire. Although it will take some time to effect the necessary changes, yet of the ultimate success of the association there is no doubt. The foreign customers will also be benefited to a considerable extent, as they will be able to have the coal direct from the pits, uniform in quality, and to be able to test it with that from other districts. A good deal of coal and coke continues to be sent into Lincolnshire for the furnaces there, whilst a rather quiet trade in engine fuel is being done with Lancashire. There is no change in the state of affairs at the Thorncleif collieries, where the men are allowed to work in comparative quietness. There appears no prospect of the dispute being settled, and it is now pretty evident that the pits will be worked on "free labour" principles. A large number of houses are to be built for the use of the workmen, but the old hands, nearly all of whom were in the receipt of good wages, and had comfortable homes (many of them being freeholders), show a strong disinclination to leave the place where they have done so well.

A very distressing accident happened on Thursday at Northowram, near Halifax. Mr. John Cawthera has a coal pit there, and two of his sons, one aged 26 and the other 15, were being lowered down the shaft, when the chain broke, and the cage and its occupants fell to the bottom, about 50 yards, and were killed instantly. A third brother, employed in the pit at the time, had the mournful task of assisting in bringing the bodies to the surface, their father being also a witness of the melancholy disaster.

**JAPANESE ENCOURAGEMENT OF ENGLISH INVENTIONS.**—Messrs. Garrett, Marshall, and Co., of Leeds, have just received an order for two of their "Hydraulic Coal-cutting Machines" for Japan, to be worked in the coal mines in the neighbourhood of Nagasaki. It shows the enterprise now being developed in that country, that machinery of such a novel character should be introduced whilst still in its infancy in England itself.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

*May 13.*—There is a steady demand for iron, and the works generally are in pretty full work. Buyers show more disposition to order in considerable quantities, and prices are rather firmer, though they are not yet, so far as the actual current rate is concerned, equal to the rate of wages; however, it is satisfactory to know that the trade is steadily improving.

The prospect of reduced duties in the United States, which is now becoming brighter, is a very hopeful sign. England must mainly look for the extension of her commerce to countries where the population is scanty in proportion to the extent of the land, and where, therefore, it answers better to pursue agriculture than manufactures. The probability that the protectionist party would lose weight after the war has long been insisted on in this letter. As yet the full influence of the South has not been brought to bear in Congress, and it must tend towards low tariffs; whilst the next census will greatly increase the representation of the West, and the vote of that section must be in favour of buying cheap goods. The shipbuilding interests, ruined by the high price of iron, inclines in the same direction, and so does the purely commercial interest, which lives on large imports and exports, and which must favour the lowering of the barrier which impedes the free flow of exchange. The threatened lock-out in Scotland, should it be carried out, would send orders to Staffordshire, though it is, perhaps, unkind to look for good luck from the misfortunes of other districts. The Hardware Trades of Birmingham and South Staffordshire are steadily improving, and more orders are coming from the United States. The chance of a reduction of

the tariff will, of course, rather check the giving out of orders, or at any rate delay their consignment to that market.

It is stated that the London and North-Western and the Great Western Railway Companies are at length disposed to consider the claims of South Staffordshire to lower freights for heavy goods, especially iron. They seem to be inclined to admit that if others charged less they would do a larger trade, in which case they might be gainers, as well as the district which they link with the ocean, and thus with its customers all over the world.

The Institute of Mining Engineers, which meets at Dudley, is arranging for a visit to Belgium, to examine what the miners and ironworkers are doing there.

Wolverhampton is proud to find that its claims to receive the Royal Agricultural Society have been held to counterbalance those of Stafford and Shrewsbury. Wolverhampton has of late been unusually favoured. The Queen inaugurated the Prince Consort's statue, and was never more loyally received. The Exhibition of last year was a great success. The Church Congress was held there a few years ago, and last year the meeting of the Congregational Union of England and Wales. In this way thousands have learnt that Wolverhampton, instead of being surrounded by mountains of shale and refuse, and canopied by constant clouds of smoke, only illuminated by the glare of blast-furnaces and the fires of iron forges, has on two-thirds of its circumference green fields and wooded country, with a far prospect of picturesque scenery. It may not have these charms for long, perhaps. The fault, south-east of which the coal and the works lie, passes through the town, and divides the grimy from the cleaner parts, but if it should be found, as so many geologists aver, that the coal seams on the other side are only somewhat deeper, the aspect will be changed, and *Punch's* wild sketches yet justified by facts.

At the South Midland Institute of Mining, Civil, and Mechanical Engineers monthly meeting, on Monday, Mr. H. Beckett, the President, in the chair. Mr. Bernard P. Walker read a paper on "Boiler Explosions, and their Causes." He argued against the now pretty well obsolete notion of an explosive force of supersaturated steam and electrical action as the causes of boilers bursting, and insisted that these accidents usually occur from defects, which became palpable by careful examination. Mr. Marten, who was present, urged the importance of engineers being made acquainted with the sources of danger to boilers. The establishment of the Boiler Insurance Association, of which he is the head engineer, was first urged in this letter to the *Mining Journal*, and it is very satisfactory to find that it is so fully accomplishing all that was predicted of it.—[A report of the proceedings is published in the Supplement to this week's *Journal*.]

The Dudley Correspondent of the *Wolverhampton Chronicle* writes:—

There is at present no very perceptible improvement in the iron trade, and nothing like the activity which existed before the late advance. The mills and forges for the most part are not fully employed, and the men, generally speaking, not so well off as they were under the old scale of wages. Few ironmasters are getting the list prices, and considering the high rate of fuel and wages the members of the trade cannot be realising anything like the profit they are entitled to when their outlay and working expenses are taken into account. The orders coming to hand are for hoops, strips, sheets, and nail rods. For large plates there are scarcely any orders in the district, and as a consequence the millmen are only partially employed. The pig-iron market is firm. In consequence of so much coming into these localities from a distance as there was. At this time there are about 160 puddling furnaces at work in South Staffordshire and East Worcestershire, and reckoning four turns as the average time the men are now working there will give a total of pigs used up of about 13,000 tons per week for the manufacture of merchant iron alone. In addition to which the present weekly yield of the district is 14,000 tons, and as there is not so much coming from the North and other places as there was, the "make" must be increased if the demand is to be met; hence the preparations making by certain parties to blow in more furnaces. Others, no doubt, will follow, if they can get their coal and stone pretty handy, so as to yield a profit for their outlay. If not, the supplies of pig-iron must be had from other sources, as they hitherto have been, for beyond all doubt there is a much larger quantity used than is produced in the district, and as a natural consequence prices are stiffening, because pig-iron is not so easily procured as it was. The prices for all mine hot-blast range from 3s. 18s. to 3s. 17s. 6d.; cold-blast, 4s. 10s.; grey forge, 3s. 2s. 6d.; and mottled, 3s. 7s. per ton. There is a good demand for thick coal for the works, but for domestic consumption the market rules dull. The deliveries by rail are much smaller than they were a month ago, as the merchants in the Midland counties are disposing of the stocks on hand. The labour market continues healthy, and the working population, generally speaking, are pretty well employed.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

*May 12.*—So active is business in the Iron Trade at present that makers are enabled, almost without an effort, to find full employment for their works in all parts of the district. Contracts have already been secured that will occupy the establishments for a considerable period; and it is confidently expected that many extensive engagements have yet to arrive from both the Russian and American markets, which, together with numerous requirements of less magnitude from the continental houses, will greatly tax the productive capacity of the large manufactorys of the district. Altogether, the prospects of the trade are so encouraging that there is every reason to believe that the utmost activity will prevail throughout the year. For railway iron particularly there is a very brisk enquiry, and from Cardiff, Newport, and the other local ports vessels of large tonnage are employed in the conveyance of rails to the American and Northern Europe markets. In reference to the home demand, there is not much to be said. The enquiry is not so good as it was generally expected to be at this time of the year, the home railway companies not having purchased on re-laying account with the freedom they were expected to. There is, however, an average enquiry, with some signs of improvement. The demand for pig-iron, bars, and other descriptions is tolerably good, and prices are firmer. In the Tin-Plate Trade a fair business is being done, and there is now some prospect that makers will in future obtain a greater share of profits on their productions, as it is scarcely likely that the high price to which block tin has risen will be long maintained. During the last week or nine days operations at the works have not been so active as they might have been, owing to the reduction of the water supplies, and the hands could only work short time.

Continued activity prevails in the Steam Coal Trade, and the quantities sent down for shipment during the week have been considerably in excess of what they were in the previous week, the men being now more regular in their attendance at work. The wages question, as remarked in last week's report, is now settled at the steam coal collieries, with scarcely an exception, and things are likely to go on agreeably for at least some time to come. The Hirwain Company and one or two small colliery owners are, perhaps, exceptions which ought to be mentioned. By these employers the men have been kept in suspense as to when they should participate in the advance which was to be granted at all the collieries. After some days of dissatisfaction and idleness an interview was obtained, and the result was a declaration by the Hirwain Company that the rise should commence on June 1. This the men strongly objected to, and since the beginning of the month work has been very irregularly attended to at those collieries. There is scarcely anything fresh to be reported in reference to the demand

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with 350 tons of iron ore (in bulk), for H. Bath and Son, and 2 boxes of sampled ore, to order; Darlin, from Bilbao, with 450 tons of iron ore, for T. Wood and Co.; Havre, from Havre, with 167 tons of copper regulus, and 6 tons of ingot copper, for H. Bath and Son; Village Bell, from Santander, with 280 tons of iron ore, to order; Abele, from Carloforte, with 618 tons of zinc ore, for H. Bath and Son.

## TRADE OUTRAGES.

As Englishmen, the readers of the *Mining Journal* must intensely abhor the recent trade outrages in Manchester. And because of their business occupations they must feel in those enormities more than the general interest of citizens. There are few colliery proprietors who are not, more or less, peculiarly concerned in the use that is made of the different clays which the soil of this country produces, and in particular those which are most largely utilised in building operations. But in a closer degree they are concerned in the suppression of Trades Union outrages. The colliery interest, it need hardly be here stated, has suffered, and is yet suffering, from them even in modern times; but they have taken that shape in the present day by which the operative, and not the employer, has been made to bear the severest consequences of the attack. True, the lives of colliery proprietors and colliery managers have been threatened, and having been believed to be in danger have been watchfully guarded; but where the threats have developed into actual assaults the workmen, and not the masters, have been the victims. The last instances of this had for their locality the part of the kingdom which of all others has been most fruitful in acts of trade brigandage. And they closely followed upon the revelations by which the country was shocked, as the result of the investigations by the Trades Union Commission, and in particular by the two sets of three commissioners, who, empowered by special Acts passed for the purpose, conducted "a searching enquiry on oath" in Sheffield and Manchester respectively.

During the enquiry in the last-named town the circumstances attending the strike then on of 1400 of the 3000 colliers employed by Messrs. KNOWLES, Pendlebury, was investigated. Messrs. KNOWLES had collieries at Pendleton, Edge Croft, Clifton Hall, Clifton Moss, Stone Clough, Little Lever, Ratcliffe, and the Cleggs, near Rochdale; and Mr. JOHN KNOWLES was the managing partner. The firm had not for 20 years employed Unionists. It was in November, 1866, that the 1400 men resolved to go over to the Union, and their employers resolved that if they did they must no longer remain in their employ, for they had determined to keep themselves free to conduct their business without extraneous interference. To obtain the needed employment of hands the firm sent to other parts of the country, getting 300 men from Staffordshire and 200 from Cornwall. The Unionists who had left the service of the firm had been tenants of cottages belonging to it; and, as their tenancies could not be immediately determined, Messrs. KNOWLES prepared beds and the necessary accommodation for the new hands in their works and store-rooms at Pendlebury. In March, 1867, one of the store-rooms there was set on fire; and had not the fire been immediately discovered the loss of hundreds of lives must have been the consequence. The store-room in which the fire took place was full of oil, tallow, and hemp, and in the room adjoining some of the new comers were residing. Close to the spot where the fire had taken place was a gasometer, with a large pressure of gas on it; and not very far from that was a powder magazine, containing about 1 ton of gunpowder, and also a room in which gun-cotton was kept. "We have no doubt from the evidence (reported the Commission) that this was the work of an incendiary, and that it took place in consequence of the dispute with the Union." As it was, the damage done was about 8000, WILLIAM HOLDFORD was one of the new hands employed by Messrs. KNOWLES. Between eleven and twelve at night a bottle full of combustible materials was thrown into the bedroom where, after the outrage already described, he and his wife were sleeping. The bottle exploded, but fortunately did no injury. HOLDFORD had previously been frequently called "knobstick," and had been told by the Union men that he should rue having come to Pendlebury. Other non-Union men in the employ of the Messrs. KNOWLES were much insulted by the Union men, and some of them were seriously injured. One man, HENRY JONES, was knocked down and rendered senseless, and cut under the eye; and another, MATTHEW BODLING, was knocked down and left for dead on the ground. His ear was split open, his skull knocked in, and his cheek-bone broken; he was also severely kicked on his side. From the effect of these injuries he is never likely to recover.

All this was occurring at about the time that similar atrocities were being enacted in the same district, by men who denied the right of the contractors and builders either to make bricks by non-Union men, by machinery, or, indeed, to buy bricks out of one of two portions of that district; one or the other portion being the allowed division, according as the place where the bricks were to be built up were in that division or this. Nor were the bricklayers allowed to lay either machine-made or non-Union made bricks, any more than a cart was permitted, without risk of having his house blown up, to cart bricks which were under the Union ban.

It is now being made known with considerable prominence that one of the effects of the Commission was to make the master builders of Manchester determine that they will no longer submit to these trade restrictions. In the spring of last year the builders' workmen, excepting the carpenters and joiners, went out on strike rather than give up their rules; but the masters held together, and at great loss and trouble have carried their point in getting a sufficient number of non-Union men, and in extensively using machinery for making bricks. The strike of the colliers to enforce Unionism on Messrs. KNOWLES was unsuccessful, and it cost the Union 16,000<sup>L</sup>, yet 80 men were in the pay of the Union when the Commission finished their investigation. The officially-published returns of that masons' Union with which the Manchester masons are associated show that 12,000<sup>L</sup> in hand when the strike began has now dwindled to worse than nothing, for it is about 2000<sup>L</sup> in debt, and in debt, we are sorry to say, to that extent to the funeral department of the Union funds; yet the same returns show that there are still some 87 masons on the funds in Manchester and 30 in Salford, in vain attempting to enforce restrictive Union rules. Pre-eminent in putting the employers of labour in Manchester into their proper position in respect to their workpeople is Mr. EDWARD JOHNSON, one of the foremost builders' contractors in the Manchester district, who has acted as honorary secretary of the branch in that city of the General Builders' Association. At the brick-making dispute he has "not only joined in the common action taken by the builders of Manchester in establishing brick-making by machinery, but has by himself taken large brick-yards, and patented brick-making machinery." At what cost has he done this? Hear Mr. JOHNSON's own reply:—

"Truly (he writes) life is becoming unbearable. My friends say I have no right to live in the country. This is a fearful state of things for a civilised country. If I go to sleep it must be done sleep, and always on the alert. My coachman has not dared to drive me home at night for the last 12 months; in fact, he would have left my service sooner than have done it. My servants now wish to leave, as they dare not stop in the house, and friends dare not come to the house for fear of meeting with some disaster. Until the matter is settled by the authorities or myself, no one at present knows where I sleep."

But this is not all. There are few of our readers who have not heard that, attempting to sleep in his own house a fortnight ago, he had hardly reached home before he and his domestics had a narrow escape from being blown-up, as the result of the most determined attempt at wholesale murder that has been perpetrated in the same districts since the firing of the premises inhabited by Messrs. KNOWLES's colliers, as set forth in the foregoing. Equally will our readers be aware that at the same time that this was going on outside Manchester, Mr. JOHNSON's timber-yard, within it, was being fired, and that the disaster could not be stayed until damage had been done to the extent of 1500<sup>L</sup>.

This is happening simultaneously with the revival of spoliation and personal violence in Sheffield, where one of the men in the employ of Messrs. JOSEPH RODGERS and SONS is lying in a precarious condition, because of a midnight attack made upon him after expressions had been used which leave but little room to doubt that the outrage was a trade affair. The man is a spring-knife cutter, is a non-Unionist, and certain of his fellow-workmen complain of him that he has preference of the work, and that he has invented a patent which "is detrimental to their interest." It is also transpiring coincidently with the stoning at Barnsley of a non-Unionist collier by a member of the South Yorkshire Union of Colliers, for which, at

the Barnsley Court House, the offender was, a few days ago, sent to a month's hard labour at Wakefield Gaol, without the option of paying a fine.

Because these recent events in Sheffield, in Manchester, and at Barnsley indicate the revival of the acts of terrorism which it had been thought had ceased with the enquiry of the Commission, we direct the special attention of the mining industry to what is now going on, and to that which immediately preceded the enquiry. The snake is not dead, it is only scathed. Every honest man's duty is to hunt it out, and wherever it is found wriggling the iron heel of the law should be brought down upon its hateful head, with determination that its life shall be crushed out of it once and for all. The Barnsley magistrates did their duty in the little matter just brought before them. We call upon the police authorities and the civilians of Manchester to do theirs. The Manchester Town Council have done well in offering 500<sup>L</sup>, and in asking the Home Secretary to make it 1000<sup>L</sup>, as a reward for the discovery of the incendiary who fired Mr. JOHNSON's timber yard; but that gentleman ought not to have to appeal in vain to either borough or county magistrate for the protection which the no vain threats levelled at him show that he needs. The readers of the *Mining Journal* are intimately concerned in this matter. They will remember the mischief that was done by the supineness of the authorities in reference to the most recent colliery disputes about Sheffield, already adverted to. The gentlemen who were the employers of the men assaulted went for a long time in dread of their life, and had to pay heavy sums for the protection they deemed necessary—protection which, as citizens, they had a right to claim from the civil powers, without more ado than the asking for it—and protection which, if we mistake not, they ultimately got, even as they got it for their men also. But got in respect of the men too late to prevent the disasters which led to misguided people being now under incarceration as convicted felons. After the experience which that case affords do not let there be a monstrous a travesty upon the boasted security of life and property as would ensue upon Mr. JOHNSON being protected from utter extermination, after he has been so maimed as to reduce him to the condition of an invalid for life, and his home and combustible possessions have been laid in ruins. We commend the subject likewise to the attention of the Government, who have yet to legislate upon the Report of the Trades Union Commissioners.

That the Government have a correct appreciation of what a threatened citizen has a right to ask, and the local authorities ought to render, which seem clear enough from the reply of the Home Secretary to Mr. GILPIN, in the House of Commons on Tuesday night. Mr. BRUCE having said that on the part of the Government he had consented to supplement the 500<sup>L</sup> reward offered by Manchester with 100<sup>L</sup> from Government, and a free pardon to an accomplice, thus laid it down:—

"I have to say that in ordinary cases of danger to life or property it is the duty of the local authority to furnish the necessary protection, but where the danger is beyond their power successfully to cope with, and where there is an apprehension of public disturbance, the aid of the central authorities should be called in."

But for the course pursued before Lord WHARNCLIFFE interposed at Sheffield one would have thought that this was well known, both to county and borough magistrates and chief constables. The early hesitancy to act with vigour there, however, showed that there is need that the Home Secretary should have spoken as he did on Tuesday. We hope now not only that Mr. JOHNSON will secure all the protection he needs, but that whenever occasion arises for the interposition of the "local authority" in threatened violence that may come nearer home to the readers of the *Mining Journal*, neither employers nor men in the West Riding or in Lancashire may have to ask in vain for the full protection to which they are entitled. Meanwhile let this plot be hunted out with a determination of which the men of Manchester ought to be capable. To the 600<sup>L</sup> offered by the local and the central authorities, 250<sup>L</sup> has been added by the General Builders' Association. Hard upon 1000<sup>L</sup> ought to be bait enough, skilfully handled, to lead to the detection of the criminals, and the splitting up of the villainous band who have plotted Mr. JOHNSON's ruin and assassination. We have reason to know that the work of detection is in good hands. It is to the interest of colliery proprietors throughout the North and the Midlands that there should this time be no failure.

## MINERAL WEALTH OF MEXICO.

Mexico is probably the richest mineral country in the world, for it is well known to contain large deposits of copper, iron, lead, tin, quicksilver, &c., as well as those rich and productive lodes of silver and gold, to the produce from which its returns have been hitherto almost entirely confined. Baron Humboldt estimates the total yield of the precious metals by Mexico, from its discovery to the commencement of the nineteenth century, at the sum of \$1,218,243,840, or 843,648,768<sup>L</sup> sterling, about one-eighth of which was in gold and the remaining seven-eighths in silver; and in a recent number of the *Journal* we gave a brief notice of a work on the "Mineral Resources of Mexico," by Mr. C. Chipman, who has resided there for 12 years, and travelled over great part of the country, in which work that gentleman says—

"If one-half of the known silver lodes of Mexico were worked as they should be, by modern machinery, and the skill that science and practice impart, the product of silver and gold alone would reach \$1,000,000,000 (200,000,000<sup>L</sup>) annually, and would employ, in various ways, ten million people."

Such an estimate may appear visionary, and is not likely even to approach realisation until the population of the country increases to at least five times its present amount; but, looking at the immense number of veins which have not yet been touched, as well as at the riches yielded by the slight workings hitherto carried on upon those which have been wrought, a very large increase of produce may be reasonably anticipated in these days of enterprise, and of improved apparatus and processes. The Veta Madre vein alone has yielded silver to the value of 45,000,000<sup>L</sup> sterling, and although it has been traced for many miles, yet the silver has been extracted only on a line of about one and half miles. Some idea may be formed of the richness of these veins from the following statement of the yield of some of the silver mines in Mexico, records of which have been preserved:—

The San Dumas Mine gave over 400,000<sup>L</sup> per year for 24 years. The Pavon divided among its shareholders over 1,200,000<sup>L</sup> per annum. The Comercante, in seven months, paid its shareholders 1,000,000<sup>L</sup> sterling. The San Avario paid its shareholders in three years 10,800,000<sup>L</sup> sterling.

The Gallego paid its stockholders in six years 2,300,000<sup>L</sup> sterling.

The Real del Monte Company has been for years past, and is still, paying its shareholders dividends averaging 300,000<sup>L</sup> per annum.

A further consideration of the circumstances and prospects of the NEW ROSARIO SILVER MINING COMPANY, now being formed, and referred to in last week's *Journal*, has led us to look into these details of silver mining in Mexico, and there are some important features in this enterprise to which we think attention should be directed. The property appears to be not one single mine, but comprises ten mines, adjoining each other, so as to be easily worked in conjunction, and under one management. Three of these mines have been extensively opened, and two of them are already producing "first-class ores, which will handsomely pay any outlay for their extraction"; and the third contains the Alinchote and Carrereta lodes, the latter of which is producing to the Real del Monte Company 10,000 tons of silver ore per annum, worth more than 100,000<sup>L</sup>. These ten mines are close to those of the Real del Monte Company, and, as shown above, contain some of the richest of that company's lodes, yielding a large part of the profits which have enabled them to divide 3,000,000<sup>L</sup> amongst the shareholders, and from which they are still deriving similar profits.

The Real del Monte Company seems to have made the above large profit, notwithstanding they have been put to a cost of about 30,000<sup>L</sup> per annum for draining their mines by steam pumping-engines until the end of 1868, when they completed the great Aviadero adit, which is about four miles long, and has taken many years to complete, and has cost that company upwards of 100,000<sup>L</sup>. This adit has also drained the mines of the New Rosario Company, which thus will not be put to any cost, nor subjected to delays for drainage, but can at once proceed to work those lodes which are already proved to be productive.

The New Rosario Company's mines, like those of the Real del Monte Company, are close to the town of Real del Monte, which has a population of 10,000 people, more than two-thirds of whom are engaged in mining, so that there is abundance of skilled labour at hand and available. The New Rosario Company's mines are under the direction of Capt. Joseph Gross, who was for nearly thirty years employed in the adjoining mines of the Real del Monte Company, and is, therefore, thoroughly acquainted with the locality and people, and with everything pertaining to mining in that district.

If the Real del Monte Company, with a capital of more than 100,000<sup>L</sup>, and notwithstanding the heavy cost of draining their mines, and of making the great Aviadero adit, has made and divided a profit of 3,000,000<sup>L</sup>, the New Rosario Company, which possesses some of the best of their lodes, and will incur no cost for drainage, ought, being under equally able and experienced management, to make a large proportionate profit on their capital, which is only 50,000<sup>L</sup>.

SWEETLAND CREEK.—The advices just received from California confirm all that has hitherto been stated with regard to this property. The manager, Mr. G. D. McLean, under date April 20, states that the tail-race is an inestimable appendage to the mines; not only the tailings from the company's mines pass through it, but the ridge above, or rather the continuation of the ridge in the direction

of San Juan, and on the opposite of Sweetland Creek, which now and must always continue to empty their tailings into the Creek. Owing to the tough nature of the cement, much gold is carried down the creek, freed from the gravel in passing over the falls, and lodges in the under currents. From two under currents there have been cleaned up \$1100, after a run of about three weeks. The accounts received by this mail show a net profit in 43 days' working of 3000<sup>L</sup>.

MINING IN RHENISH PRUSSIA.—The attention of the readers of the *Mining Journal* may be directed to the notice in the *Mining Notabilia* on the Phoenix Silver-Lead and Blende Mining Company, now being successfully worked, stating that average samples of the ore may be seen at the offices of the company, Great Winchester-street-buildings, 85 per cent. for lead, and 42 oza. of silver to the ton of ore; also to the article by the local Correspondent of the *Journal*, and to the report of Herr Jäger, the manager of the mine.

MINING AS AN INVESTMENT.—Messrs. Bartlett and Chapman's "Investment Circular and Financial Record" for May contains a vast amount of information of interest and utility to capitalists, Railways, Foreign Securities, Preference Stocks, Joint-Stock Banks, &c., being in turn referred to. With regard to British mines, they say that the consequence of the favourable change in the metal market is that shares in good tin mines are not readily to be bought, as holders, with the prospect of a still further improvement before them, are not disposed to part with their shares. Where they can be bought at fair prices they should be bought at once, for even the highest priced ones yield the purchaser a good return—Cook's Kitchen, at 15% return 7½ per cent.; Ding Dong, at 19, 21 per cent.; Dolcoath at 135, 13½ per cent.; East Pool at 8, 15 per cent.; East Lovell at 7, 22-1/2 per cent.; Herodfoot at 42, 11 per cent.; Providence at 40, 15 per cent.; West Caradon at 30, 10 per cent.; West Calverton at 56, 14½ per cent.; Jane at 49, 18½ per cent. These dividends, which are paid every two or three months, excepting in Herodfoot, which are paid every four months, range from 7½ to 22½ per cent., on the current price of the shares, the average of the ten per cent. At the end of February the average was 16%. Hence it appears that there has been an improvement in the price of shares, and the improvement continues.

HOW TO INVEST AND WHAT TO SELECT.—The fifth edition of Mr. E. J. BARTLETT'S "Capitalists' Guide" has just been issued. The object being to draw attention to a selected list of mines in which investment is considered desirable for those who seek good returns for capital invested with slight risk, but a few in each district are referred to; but as Mr. Bartlett classifies them into dividend and progressive Cornish and Welsh, the capitalist, whether large or small, will find ample information to guide him.

PERPETUAL MOTION.—We observe that Mr. DIRCKS, C. E., has prepared for publication a second series of his *History of Perpetual Motion Schemes*, which appeared in 1861. We understand that the additional matter of this second series dates back to the 13th century; and will contain notices of about 80 patents taken out during the last nine years. Surely it is now time that this redress mania prove the inertia of matter should itself come to a standstill.

During the week the condition of the CORNISH MINE SHARE MARKET, as far as regards tin stock, has again improved, both in the quotations and in the amount of business transacted. The enhanced prices and exceedingly firm aspect of the tin market just now seem to indicate that still higher standards may soon be obtained by the producer, and the probability of a reaction occurring sooner or later through the restriction upon the consumption of the metal, and the increased production, which an unusually high price inevitably causes, does not apparently exercise much influence in restraining the demand for shares, either as an investment for dividends, or speculation for even yet higher prices. The statistical report of the tin market does not certainly point to any reduction in the value of the metal for at least three or four months, which is, doubtless, considered by many a sufficiently long time to satisfactorily adjust the fresh engagements entered into recently before any less favourable event should supervene.—EAST BASSETT DISCOVERY continues to hold good. The engine is now in good working order, quite equal to take the mine down to the 200, where it is not unlikely the shaft will be sunk as speedily as possible. The prospects of having a good tin mine in depth are increasing daily. The ground is easier in the cross-cut at the 130, towards the great tin lode. If this lode is cut good it will be desirable to prepare the floors and erect stamps at once.—WHEAL AGAR holds its own in the sump-shaft, the 130 east and west, and the 140 east and west. At the next quarterly meeting it is expected no call will be required.—AT BOSWEDDEN AND WHEAL CASTLE the 95 west, on Wheal Call lode, has very much improved in the past week. The end is now opening good paying tin ground, with every indication of its continuing. In the 85 west, also, the lode looks very congenial for making tin. At the eastern part of this mine the prospects are also regarded as cheering, and a shaft is at once to be sunk through to make a communication with the 90, on the Whiteweth lode. On completion of this, tin ground will be immediately available for working.—West Briton.

EXTRAORDINARY DISCOVERY OF TIN IN CORNWALL.  
THE TERRAS TIN MINING COMPANY (LIMITED), ST. STEPHENS, NEAR ST. AUSTELL, CORNWALL.

Was recently formed with a nominal capital of £25,000 in shares of £1 each, which are fully paid. The whole of the shares were at once and eagerly taken up, principally by gentlemen who are thoroughly conversant with Tin Mining, and residential in the county.

Independent of the several valuable tin lodes traversing the sett, from which large and profitable results are anticipated, there is an extraordinary productive tin-bearing vein course running through the property for a mile in length, and is from 40 to 50 feet wide. The whole of the stuff as broken down (which can be worked as an open quarry from 4 to 25 feet deep) will be trammed away to the stamping-mills, one of which is being completed with 48 heads attached; other mills are to follow. The tin-producing stuff is inexhaustible, and proved by undoubted authority that the average yield is 1 cwt. of black tin to 10 tons of stuff. It surpasses anything of the kind ever discovered in this part of Cornwall. This alone, without making any calculation upon the large returns of tin to be extracted from the regular lodes referred to above, would leave a profit on the working of at least 50 per cent. They will have a large parcel of tin ready for the market in June, to be followed by monthly sales, with every prospect of early dividends. Those investors who are fortunate enough to secure an interest at the present low price of £1 2s. per share (of which a limited number only can be had) cannot fail to make a large profit. It is firmly believed that these shares will go to as many pounds as they are now selling for shillings."

We have received a telegram to say the first stamping mill is in full operation, and working beautifully. The others, with 152 additional heads, are in course of construction. These, when complete, will stamp out 200 tons of stuff daily.

Applications for the limited shares should at once be made to Messrs. ENDEAN and CO., Stock and Sharedealers, 55, Gracechurch-street, London, E.C.

**WELSH LEAD MINES.**—LARGE PROFITS TO BE MADE WITHOUT RISK.

The rich deposits of lead in Wales, which, with few exceptions, were neglected until within a comparatively recent period, when the low price of tin and copper had so far reduced the returns from many of the mines in Cornwall as to render them unprofitable in working, have during the last twelve or eighteen months excited considerable public attention, and companies have been formed, which are making large profits, with every probability of increasing them, as the workings of the mines are continued, whilst other companies are opening their mines with a certainty of such success as justifies all that was originally put forth as to their richness. They will, no doubt, return large profits for many years to come.

Some of these mines are in South Wales, and some in North Wales, both extremes of the Principality containing vast

## THE MINING JOURNAL.

## MINING SETTS IN DEVON.

TIN, COPPER, AND LEAD, in the Manor of SHEEPSTOR, and LANDS in TAVISTOCK, WHITCHURCH, PETER TAVY, LAMERTON, and LIDFORD. Water power. Terms, 21 years, renewable. Dues, 1-30th for Tin, 1-20th for Copper and Lead, reduced to 1-60th after a moderate outlay, until mines pay cost. Apply to Mr. CATER, Solicitor, Plymouth.—Feb. 19, 1870.

## TO CAPITALISTS, AND OTHERS.

VALUABLE TIN, LEAD, IRON, SLATE (Cornish and Welsh), CHINA-STONE, and CHINA-CLAY SETTS may now be had on reasonable terms. For particulars, apply to—

Mr. W. D. KING, Solicitor, Camelford, Cornwall.

## VALUABLE CORNISH MINING MACHINERY.

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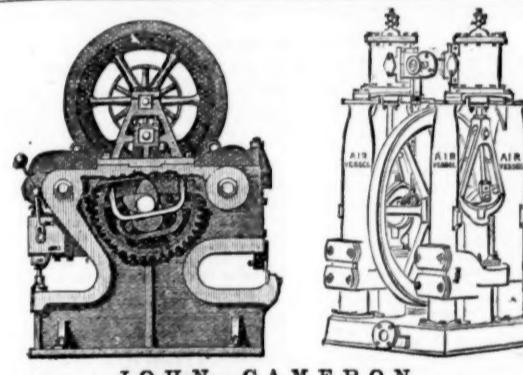
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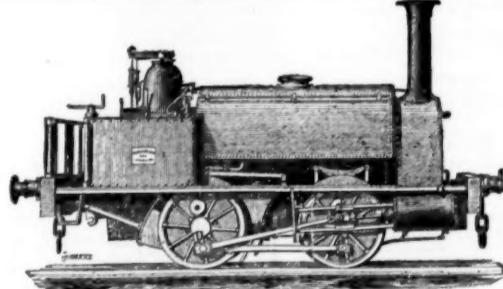
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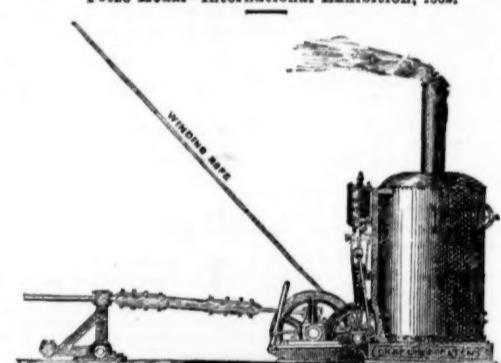
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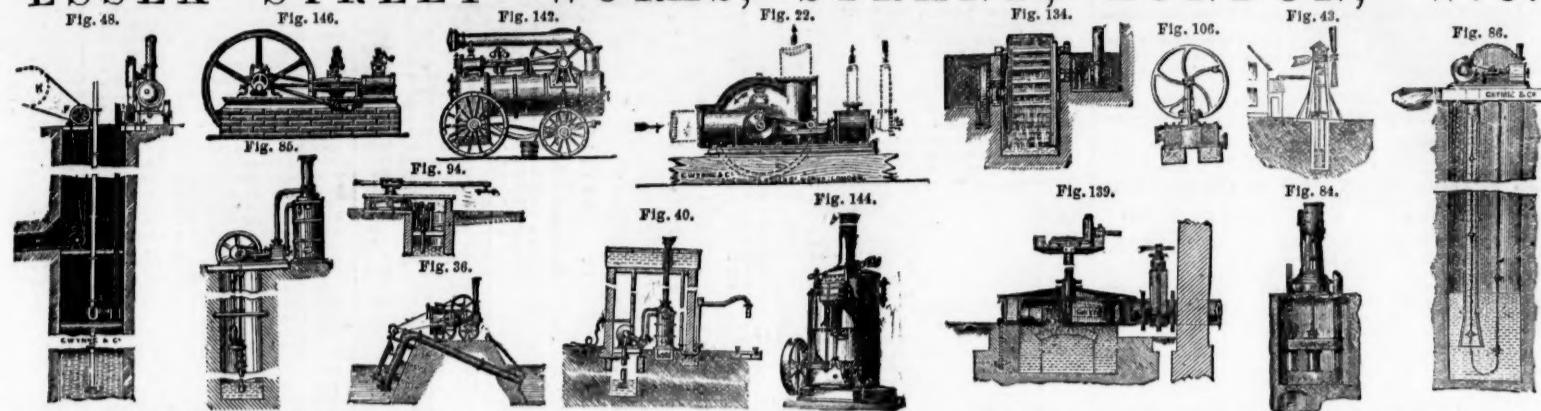


Fig. 144.—Vertical Engine, all sizes, from 2 to 20-horse power.  
Fig. 146.—Horizontal Engine, from 4 to 100-horse power.  
Fig. 142.—Portable Engine, from 2½ to 30-horse power.  
Fig. 40.—Gwynne and Co.'s Combined Stationary Pumping Engine.  
Fig. 139.—Turbine Water-wheel, from 1 to 300-horse power.

Fig. 22.—Combined Pumping Engine, all sizes, obtained Prize Medal, Paris Exhibition.  
Fig. 85.—Deep Well Pumping Engine, all sizes.  
Fig. 134.—Water-wheel Pumping Machinery.  
Fig. 36.—Gwynne and Co.'s Patent Syphon Drainage Machinery.  
Fig. 95.—Horse-power Pumping Machinery.

Fig. 86.—Chain Pump Pumping Engine.  
Fig. 48.—Deep Mine Centrifugal Pumping Machinery.  
Fig. 84.—Double-acting Vertical Pumping Engine.  
Fig. 106.—Gwynne and Co.'s Improved Plunger Hand Pump.  
Fig. 43.—Wind Power Pumping Machinery.

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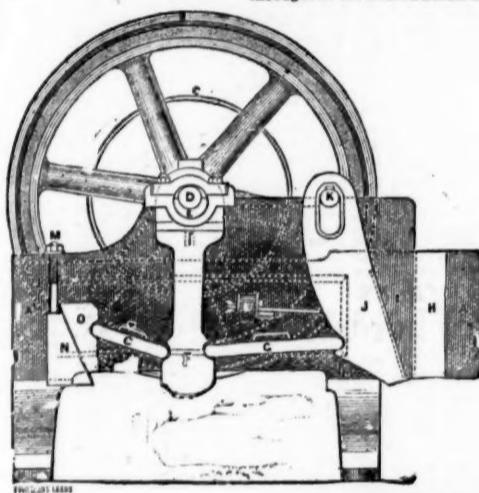
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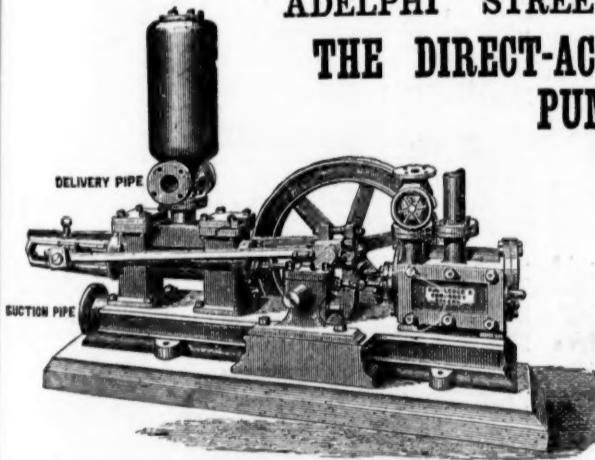
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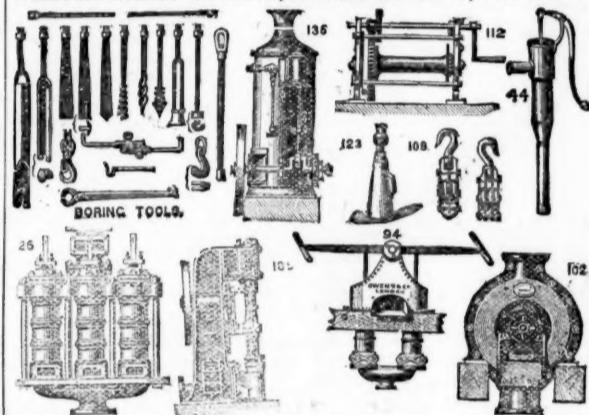
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6000 Boscastle, t, c. St. Just .. 1 0 0 .. 6 .. 0 2 0 .. 0 2 0 .. Apr. 1870

200 Bodallack, t, c. St. Just .. 91 5 0 .. 220 .. 220 230 .. 565 5 0 .. 5 0 .. Feb. 1870

12000 Bronfondy, t, Cardigan\* ... 1 0 0 .. 6 .. 1 4 7 .. 1 0 1 .. 1 0 1 .. Apr. 1870

5094 Bwch Consols, s-l, Cardigan\* ... 4 0 0 .. 3 1/2 .. 3 1/2 4 .. 0 9 0 .. 0 2 .. May 1870

9160 Cashwell, t, Cumberland\* ... 2 10 0 .. — .. — .. 0 10 0 .. 0 2 .. Dec. 1869

12800 Chanticleer, t, Flint .. 15 5 7 .. 5 .. 16 15 0 .. 0 10 0 .. Aug. 1869

1000 Cook's Kitchen, c, Illogan .. 10 0 0 .. — .. — .. 0 10 0 .. 0 10 0 .. Apr. 1870

1000 Cornwall Hematite\* ... 10 0 0 .. — .. — .. 0 10 0 .. 0 10 0 .. Feb. 1870

509 Greigbrae and Penkieve, t .. 10 0 0 .. — .. — .. 2 5 0 .. 1 5 0 .. Apr. 1869

867 Cwm Erin, t, Cardiganshire\* ... 7 10 0 .. — .. — .. 31 18 0 .. 0 5 0 .. Apr. 1869

12500 Cymwystwith, t, Cardiganshire\* ... 60 0 .. — .. — .. 15 0 .. 1 0 0 .. July 1869

280 Derwent Mines, s-l, Durham .. 300 0 .. — .. — .. 117 0 .. 2 10 0 .. July 1869

1024 Devol. G. Consols, c, Tavistock\* ... 1 0 0 .. 6 .. 114 1 .. 114 1 .. 1 0 0 .. Apr. 1870

655 Ding Dong, t, Gwalia\* ... 49 14 6 .. 4 1/2 .. 4 1/2 4 .. 0 7 0 .. 0 4 .. Jan. 1870

1422 Dolcoath, t, Camborne\* ... 32 4 6 .. 185 .. 120 185 .. 238 12 6 .. 3 0 .. Apr. 1870

614 East Caradon, t, Illogan .. 14 0 0 .. 13 1/2 .. 13 1/2 6 .. 1 2 3 .. 1 0 0 .. Apr. 1870

12000 East Cadron, t, Illogan .. 14 0 0 .. 13 1/2 .. 13 1/2 6 .. 1 2 3 .. 1 0 0 .. Apr. 1870

15000 East Pool, t, Illogan .. 14 0 0 .. 13 1/2 .. 13 1/2 6 .. 1 2 3 .. 1 0 0 .. Apr. 1870

1906 East Wheal Lovell, t, Wendron .. 3 0 0 .. 26/2 .. 26/2 27/2 .. 10 16 0 .. 0 2 0 .. Apr. 1870

2800 Foxdale, t, Isle of Man\* ... 500 0 .. — .. — .. 17 5 0 .. 0 10 0 .. Mar. 1870

5000 Frank Mills, t, Christow .. 3 18 6 .. — .. — .. 0 4 1 .. 0 6 0 .. Apr. 1869

3550 Gavton, t, Tavistock .. 3 10 6 .. — .. — .. 0 3 0 .. 0 3 0 .. Jan. 1869

18000 Great Laxey, t, Isle of Man\* .. 4 0 0 .. 19 .. 18 19 .. 12 3 0 .. 0 10 0 .. Mar. 1869

3000 Great Northern Manganese\* .. 5 0 0 .. — .. — .. 5 p.c. .. Feb. 1869

5000 Great Wheal Vor, t, Helston .. 40 0 .. 12 .. 11 12 .. 15 8 6 .. 0 2 0 .. Mar. 1870

1024 Herdfoot, t, near Liskeard\* .. 8 10 0 .. 41 .. 41 43 .. 52 10 0 .. 0 10 0 .. Feb. 1870

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